

SEQUENCE LISTING

<110> Gala, Jean-Luc
Irenge, Leonid

<120> Assay for detecting and identifying micro-organisms

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<140> PCT/EP2005/002927

<141> 2005-03-18

<150> BE 2004/0152

<151> 2004-03-19

<160> 479

<170> PatentIn version 3.3

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<211> 597

<212> DNA

<213> Enterococcus Faecalis

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<212> DNA

<213> Enterococcus gallinarum

<400> 2

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 <212> DNA
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 <212> DNA
 <213> Enterococcus faecium

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 <223> n is a, c, g, or t

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 <212> DNA
 <213> Enterococcus durans

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<210> 8

<211> 597

<212> DNA

<213> Streptococcus pyogenes

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aggacatcac aggtgttcgt agccttgatg agcttcctga aaatgcccgc aactacgttc 540

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<210> 9

<211> 599

<212> DNA

<213> Streptococcus pneumoniae

<400> 9

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attgacaagg ttgtaggtgt atgtaaagct tatacgagtc gtgtaggaga tggctctttc 180

cdaactgagt tgtttgatga agtgggagaa cgtatccgtg aagtgggtca tgaatatggt 240

acaacaactg gtcgtccacg tcgtgtaggt tggtttgact cagttgtgat gcgtcatagc 300

cgctcgtgtt ctggtattac taacctttct ttgaactcta ttgatgtttt gagcggtttg 360

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gctagtcttg agcaattgaa acgttgcaag cctatctatg aagagttgcc aggttggtca 480

gaagatatta ccggagttcg caatttgaa gatcttcctg agaatgcgcg taactatggt 540

cgctcgtgtga gtgaattggt tggcgttcgt atttctactt ttctcagtag gtccaggcc 599

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 <212> DNA
 <213> Streptococcus oralis

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 attgacaagg ttgtagggtgt ctgtaaagcc tacacaagtc gtgtaggaga tggaccgttc 180
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 gaagacatca ctggagtcg taatttgaa gaccttcctg agaatgcacg caactatggt 540
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<210> 11
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 <212> DNA
 <213> Staphylococcus hominis

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<210> 12
 <211> 560

<212> DNA
 <213> Bacillus anthracis

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 aattatctat gttctcagtg 560

<210> 13
 <211> 560
 <212> DNA
 <213> Bacillus anthracis Butare

<400> 13
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<210> 14
 <211> 560
 <212> DNA
 <213> Bacillus anthracis Sterne

<220>
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 <223> n is a, c, g, or t

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<210> 15
 <211> 560
 <212> DNA
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<222> (560)..(560)
<223> n is a, c, g, or t

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<213> Bacillus anthracis

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<220>
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<223> n is a, c, g, or t

<400> 16

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<210> 17
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 <212> DNA
 <213> *Bacillus anthracis*

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 <222> (6)..(6)
 <223> n is a, c, g, or t

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<210> 18
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 <213> *Bacillus cereus*

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 <223> n is a, c, g, or t

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 <222> (4)..(4)
 <223> n is a, c, g, or t

<220>
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 <222> (553)..(553)
 <223> n is a, c, g, or t

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<210> 19
 <211> 551
 <212> DNA
 <213> *Bacillus cereus*

<220>
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 <222> (545)..(545)
 <223> n is a, c, g, or t

<400> 19

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acgttttaac aggtattcca actcttaaaa tttgtgtagc ttacaaatac aatggcgaag	360
ttattgatga agttccagct aacttaaaca ttttagcgaa atgtgagcct gtatatgaag	420
agcttccagg ttgggaagaa gatattactg gtgtaaaatc attagatgaa cttcctgaaa	480
atgcacgaaa atacgtagaa cgtgtttctg agttaacagg aattcaaata tctatgttct	540
cagtnggccc c	551

<210> 20
 <211> 598
 <212> DNA
 <213> *Bacillus megatherium*

<400> 20	
ctattcgaag gggcacaagg tgttatgtta gatatcgatc aaggaaacata tccatttggt	60
acatcttcaa acccagtagc ggggtggagta acaattgggt ctggggtagg tccatctaaa	120
atcaaacacg ttgtaggtgt atcaaaagcg tatacaactc gtgttggtga cggccctttc	180
ccaactgaat taacaaacga aatcggtgat caaatcogtg aagtaggacg tgaatatggt	240
acaacaactg gtcgtcctcg ccgtgtaggt tggttcgaca gtgtagttgt acgtcatgct	300
cgtcgcgtta gtggaatcac agatctatct ttaaactcaa ttgatgtatt aacgggaatt	360
gagacattaa agatttgctg agcttatcgt tataaagggg aagttatgga agaattccct	420
gctagcttaa aaacacttgc agagtgcgaa cctgtatatg aagagcttcc aggttgga	480
gaagatatta cgggtgtgaa aacattagat gagttacctg ataacgctcg ccactactta	540
gagcgcgtgt ctcaattaac aggtattcct ttatctatct tctcagtagg tccaggcc	598

<210> 21
 <211> 598
 <212> DNA
 <213> *Enterococcus casseliflavus*

<220>
 <221> misc_feature
 <222> (11)..(11)

<223> n is a, c, g, or t

<400> 21
tattcgaagg nagctcaagg cgtgatgctg gatatcgacc aaggaaccta tcctttcgtg 60
acatcatcca accccgttgc tggagggtgc accatcggtg gtggtgtggg tccttcaaaa 120
atcaacaaag tcgttggtgt ctgcaaagct tacacctctc gggtaggaga tggtcctttc 180
ccaacggaac tgtttgatga aacagggtgaa caaatcgtg agatcggtcg tgaatacggg 240
acaacgacag gacgtcctcg ccgtgtgggc tggtttgata ccgtcgtgat gcgccattca 300
aaacgggtct cagggatcac gaatctatcc cttaactcga tcgatgtctt gagcggctta 360
gaaaccgtga agatctgtac ggcttatgaa ctagacggcg aattgatcta tcattacca 420
gcaagcttga aagagttgaa ccgtgcgaaa ccagtctacg aagaacttcc tggctggtct 480
gaagacatta ctggctgcaa aacattagca gatctgccag aaaatgcacg caattacggt 540
caaccgatct ctgaattagt cgggtgtccgc atttcgacct tctcagtagg tccagacc 598

<210> 22
<211> 598
<212> DNA
<213> *Enterococcus raffinosus*

<400> 22
ctatttgaag gtgctcaagg cgttatgctg gatattgatc aaggaaccta tccatttggt 60
acttcttcga acccagttgc cgggtgggta actatcggtg gtggtgtagg acctgctaaa 120
atcgacaaag ttgtcgggtgt ttgtaaagcc tatacttcac gcgtaggtga tggacctttc 180
ccaactgaat tgtttgatga agttggagat cagattcgtg aagtcggtcg tgaatatgga 240
acgactactg gtcgtccacg tcgtgtgggc tggtttgact cggttgtgat gcgtcattca 300
aaacgtgttt ctgggattac gaatctttct ttaaactcga ttgatgtctt gagcggctctg 360
gatacagtga aaatttgtac agcgtatgag ctggacggag aactaattta ccattatcca 420
gcaagcctaa aagaattaaa tcgttgtaag cccgtttatg aagaactacc tggttggagc 480
gaagatatta caggctgccg tgatttagct gatctaccgg aaaatgcgcg taattatgta 540
cgtcgcgttt ctgaacttgt ggggtgtgcgt atctcgacct tctcagttgg tcctggtc 598

<210> 23
<211> 598
<212> DNA
<213> *Staphylococcus aureus*

<400> 23

ctatttgaag gggcacaagg tgtaatgtta gatatcgacc atggtacata tccattcggt	60
acatcaagta atccaattgc aggtaacgtt actgttggtta cagggtgtagg tcctacattc	120
gtttcaaagg taattggtgt atgtaaagct tatacatcac gtgttggtga tgggtccattc	180
cctactgaat tattcgatga agatggacat catattagag aagttggtcg tgaatatggt	240
acaacaacag gacgtccacg tcgtgtaggt tggtttgatt cagttgtatt acgtcactct	300
cgtcgtgtaa gtggtattac agatttatct attaactcaa tcgatgtttt aacaggccta	360
gacacagtga aaatctgtac agcttatgaa ttagacggta aagaaattac tgagtaccca	420
gcaaacttag atcaattaa acgttgtaaa ccaatctttg aagagttacc aggttgga	480
gaagacgtaa caagtgtgcg tacttttagaa gaattacctg aaaatgcacg taaatattta	540
gagcgtattt cagaattatg taatgtacaa atttctatct tctcagtagg tccaggcc	598

<210> 24
 <211> 598
 <212> DNA
 <213> *Staphylococcus epidermidis*

<400> 24	
ctcttcgaag gtgctcaagg tgtcatgtta gatatcgacc atggtacata tccattcggt	60
acatctagta atccagttgc aggtaacgtt acagtaggta cagggtgttg ccctacatca	120
gtgtctaaag tgattggtgt atgtaaatca tatacatctc gtgtaggtga cgggtccattc	180
ccaactgaac tttttgatga agatggccac catattagag aagtgggtcg tgaatatggt	240
acaactactg gacgtccacg tcgtgtaggt tggttcgact cagttgtatt acgtcattca	300
cgtcgtgtaa gtggtatcac agatctttca attaactcaa tcgacgtttt aacaggatta	360
gacacagtta aaatttgtag tgcttacgaa ttagatggtg aaaaaattac tgaataccca	420
gcaaacttag atcaattaag acgttgtaaa cctatcttcg aagagcttcc aggttgga	480
gaagacatta caggttgtcg tagtttagat gaacttctcg agaatgcacg taattactta	540
gagcgtattt cagaattatg cggtgtccat atttcaatct tctcagtagg tcctggtc	598

<210> 25
 <211> 567
 <212> DNA
 <213> *Streptococcus mitis*

<220>
 <221> misc_feature
 <222> (11)..(11)

<223> n is a, c, g, or t

<400> 25
tatggctagc natagaccaa ggtacgtatc catttggttac gtcacaaac cctgtggctg 60
gtggtgttac gattggttct ggtgttggtc caagtaagat tgacaagggt gtaggtttat 120
gtaaagccta tacgagtcga gtaggagacg gtcctttccc aactgaattg tttgatgaag 180
tgggagaacg tatccgtgaa gttgggtcatg aatatggtac aacaactggt cgtccacgtc 240
gtgtgggttg gtttgactca gttgtgatgc gtcatagtcg tcgtgtttct ggtattacta 300
atctttcatt gaactctatc gatgttttga gtggtttaga tacagtgaag atctgtgtgg 360
cctatgatct tgatggtcaa cgtattgact actatccagc tagtcttgag caattgaaac 420
gttgcaagcc tatctatgaa gagttgccag gttggtcaga agatattact ggagttcgta 480
atttggaaga tcttctgag aatgcgcgta actatgttcg tcgtgtgagt gaattgggtg 540
gcgttcgtat ttctactttc tcagtag 567

<210> 26
<211> 572
<212> DNA
<213> Streptococcus species

<400> 26
atggcttgct attgaccaag ggtacatacc catttgtaac atcatctaac ccagtcgctg 60
gtggtgtaac aatcggttct ggtgttggtc caagtaaaat caacaaagtt gtcggtgtat 120
gtaaagccta cacaagccgt gttggtgacg gaccattccc aactgaactt ttagacgaag 180
ttggtgaccg catccgtgaa gtgggtcacg aatatgggac aacaactgga cgtccacgtc 240
gtgttggttg gtttgactca gttgttatgc gtcacagccg ccgcgtatca ggtatcacia 300
acttgtcact taactcaatt gacgttcttt caggtcttga tacggtcaaa atctgtgtgg 360
catacgacct tgacggtcaa cgtatcgacc actaccagc aagccttgaa caattgaaac 420
gttgtaaacc aatctacgaa gaattgccag gttggtcaga agacatcaca ggttgccgta 480
gcctagatga acttcccgaa aatgctcgtg actacgttcg ccgtgttggt gaactcgttg 540
gtgttcgcat ttcaacattc tcagttggcc cc 572

<210> 27
<211> 571
<212> DNA
<213> Streptococcus canis

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<220>
<221> misc_feature
<222> (9)..(9)
<223> n is a, c, g, or t

<400> 27
tggcttgcnatcgaccaaggtaacttacctttgttacttcttcaaaccagttgctgg60
tggggtaacatcggttcaggtgttggtccaaagcaagataataaagttgtcggtgtatg120
taaagcttacacaagccgtgttggtgacggtccgttcccaacagaacttcagatgaagt180
tggagatcgtatccgtgaaa ttggtcacgaatatggtacaacaactggacgtccacgtcg240
tgttggttggttttgactcagttgttatggtcacagccgcgcgtatcaggtatcacaaa300
cttgtcacttaactcaatcgatgttctttcaggacttgatctgtttaaaa tctgtgtggc360
atacgaccttgacggtcaacgtatcgaccactaccagcagagtcttgaacaattgaaacg420
ttgtaaaccaatctacgaagaattgccaggttggtcagaa gacatcacaggttgccgtag480
cctagatgaacttcccgaatagtctcgtgactacgttcgcgtgttggtgaactcgttgg540
tgttcgcatttcaacattctcagttggccc c571

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```

<210> 28
<211> 573
<212> DNA
<213> Streptococcus mutans

```

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<220>
<221> misc_feature
<222> (11)..(11)
<223> n is a, c, g, or t

```

```

<220>
<221> misc_feature
<222> (567)..(567)
<223> n is a, c, g, or t

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```

<400> 28
tatggcttgc nattgaccaa ggtaacctatccatttgtaa cttcatcaaa tccagttgca60
ggtggcggtta ccatcggatc tgggtgttgga ccaagtaaaa tcaataaggttggttggtg120
tgcaaagcctataccagccgtgtaggtgatggtcctttccccacagaacttttgaccaa180
acgggagagcgcattcgtgaagttgggcatgaatacggga caacaacagggcgtccgcgt240
cgagttggttggtttgactcagttgttatgcgtcacagccgccgtgtatcaggcattacc300
aatttatctcttaactgtatgtatgtacttccaggtcttgatatcgtaaaa aatctgtgta360
gcctatgatttggtatggaaaacggattgatcactaccctgccagtctcgaacaactcaaaa420

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cgctgtaaac ctatztatga agaattgccg ggctggctctg aagatattac aggggttcgc 480
agtttagaag atcttcctga aaatgctcgt aattatgtcc gccgtgtaag tgaattagtt 540
gggtgttcgta tttctacttt ctcagtngtc ccc 573

<210> 29
<211> 572
<212> DNA
<213> *Streptococcus gordonii*

<400> 29
taatgctagc aattgaccaa ggtacctatc catttgtaac ctcatctaata ccagttgctg 60
gtggtgtaac gatcggttct ggtgtgggtc ctagcaagat tgacaaagta gtgggtgttt 120
gtaaagccta tacaagtcgt gttggtgatg gtcctttccc aacagagctt ttcgatgaag 180
taggtgaccg cattcgtgag gttggtcatg agtatggtag aacaacagga cgtccgcgtc 240
gagttgggtg gtttgactct gttgttatgc gccatagccg ccgtgtatct gggattacca 300
atctttcgtt taactctatc gatgttttga gcggtctgga tacagtcaag atctgtgtag 360
cctatgattt ggatggccaa agaatcgacc actatccagc tagtttgga cagcttaaac 420
gttgtaagcc gatttacgaa gagcttcctg gatggctctga agatattact ggcgttcgta 480
agttagaaga tcttccagaa aatgctcgca actatgttcg gcgagtaagc gagttgggtg 540
gtgtacgtat ttccaccttc tcagttggcc cc 572

<210> 30
<211> 571
<212> DNA
<213> *Bacillus species*

<220>
<221> misc_feature
<222> (18)..(18)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (565)..(565)
<223> n is a, c, g, or t

<400> 30
tatggcttgc aattgacncg gtacgtaccc attcgttaca tcttctaacc cgattgcggg 60
tggtgtaaca gttggaactg gagttgggtc tgcgaaagtt actcgcgttg taggtgtatg 120
taaagcatat acaagccgtg ttggtgacgg tccattccct actgaactta atgatgaaat 180

tggatcatcaa attcgtgaag ttgggtcgtga gtacggaaca acaactgggtc gtccgcgccg 240
 cgtaggttgg ttogatagcg ttgttgtaag acatgcgcgt cgtgttagtg gtttaacgga 300
 tctatcatta aattctatcg acgttttaac agatattccg actcttaaaa tttgtgttgc 360
 ttacaaatac aatggcgaag ttatcgatga agttccagca aacttaaaca ttttagcaaa 420
 atgtgagcct gtatatgaag agcttccagg ttggacagaa gatattactg gtgtaaaatc 480
 attagacgag ctctctgaaa atgcacgaaa atacgtagaa cgtgtttctg agttaacagg 540
 aattcaatta tctatgttct cagtngtccc c 571

<210> 31
 <211> 574
 <212> DNA
 <213> *Bacillus pumilus*

<220>
 <221> misc_feature
 <222> (570)..(570)
 <223> n is a, c, g, or t

<400> 31
 gttatggctt gctattgatc aaggacata tccatttgtc acgtcatcta acccagtagc 60
 tggaggagtg acgattgggt ctggcgtagg accaacaaaa attcaacatg tggtcggcgt 120
 gtcaaaagcg tacacaacac gtgttgga ga tggcccaatc ccgacagaac tccatgatga 180
 aattggcgat caaatccgtg aggttggccg tgaatacggc acaacaactg gacgtccgcg 240
 ccgtgttggc tggtttgaca gtgtcgttgt ccgtcatgct cgacgtgtga gcgggattac 300
 agatctatct cttaactcaa ttgatgtact gacagggatt gaaacattga aaatctgtgt 360
 cgcttataaa ttgaacggag aaatcacaga ggaattccca gcaagtctaa atgaactagc 420
 gaaatgtgag cctgtctacg aagaaatgcc aggatggaca gaggatatta caggcgtgaa 480
 gaatttaagc gaactgcctg aaaatgcccg tcattattta gagcgcattt cacaattaac 540
 aggtattcca ctttccattt tctcagttgn cccc 574

<210> 32
 <211> 560
 <212> DNA
 <213> *Enterococcus villorum*

<220>
 <221> misc_feature

<222> (557)..(557)
 <223> n is a, c, g, or t

 <400> 32
 tatcgaccag ggacatatcc atttggtact tcttccatcc agtagcaggt ggtgtaacaa 60
 ttggtagtgg cgttggtcca tctaaaatta ataaagtcgt cggagtatgt aaagcttata 120
 cttctcgtgt tggagatggc ccgttcccta cagaattatt tgatgaaaca gggcaacaaa 180
 tacgtgaagt aggtcgtgaa tatggcacia caacaggtcg tccacgacga gttggatggt 240
 ttgatacggg tgttatgcgc cattcaaaac gtgtatcagg tattacaaat ttatctctta 300
 attcgattga tgtattaagc ggattagaaa cagtaaaaat ttgtacggcc tatgaactag 360
 atggtgagct gatttatcat taccagcaa gtttgaaaga attgaaacgt tgtaaaccag 420
 tatatgaaga actacctgga tggctctgaag atattacgaa atgcaagaca ctttctgaat 480
 tgccagaaaa tgcacgtaac tatgtaagac gtatttctga gcttgtaggt gtacgcatct 540
 ccacatttct cagtggnccc 560

<210> 33
 <211> 554
 <212> DNA
 <213> *Bacillus thuringiensis* serovar *israelensis*

<220>
 <221> misc_feature
 <222> (2)..(2)
 <223> n is a, c, g, or t

 <400> 33
 cncggtacgt acccgttcgt tacatcttct aaccgattg cgggtggtgt aacagttgga 60
 actggagttg gccctgcgaa agttactcgc gttgtaggtg tatgtaaagc atatacaagc 120
 cgtgttggtg acggtccatt ccctactgaa cttaatgatg aaattggtca tcaaattcgt 180
 gaagttggtc gtgagtacgg aacaacaact ggtcgtccgc gccgcgtagg ttggttcgat 240
 agcgttggtg taagacatgc gcgtcgtggt agtggtttaa cggatctatc attaaattct 300
 atcgacgttc taacagatat tccaactctt aaaatttggt ttgcttacia atacaatggc 360
 gaagttatcg atgaagttcc agcaaactta aacatttttag cgaaatgtga gcctgtatat 420
 gaagagcttc caggttggac agaagatatt actggtgtaa aatcattaga cgagcttcct 480
 gaaaatgcaa gaaaatacgt agaacgtggt tctgagttaa caggaattca attatctatg 540
 ttctcagtggt cccc 554

<210> 34
 <211> 552
 <212> DNA
 <213> *Bacillus thuringiensis* serovar *kurstaki*

<220>
 <221> misc_feature
 <222> (547)..(547)
 <223> n is a, c, g, or t

<400> 34
 ggtcgtatcc attcgttaca tcttctaacc cagttgctgg tgggtgaaca atcggttctg 60
 gagttggtcc ttctaaaatc aatcgtgtag taggcgtatg taaagcatat acaagccgtg 120
 ttggtgacgg tccattccct actgaactta atgatgaaat tggccatcaa attcgtgaag 180
 ttggtcgtga atatggtaca acaacaggtc gtccacgtcg cgtagggttg tttgacagcg 240
 ttgttgtaag acatgcacgc cgtgtgagtg gtttaacaga tttatcttta aactctatcg 300
 acgtattaac aggtattcca actgtgaaaa tctgtattgc atataagtat aatggagaag 360
 ttctggatga agttccagca aacttaaaca ttttagcaaa atgtgagcct gtatatgaag 420
 agcttccagg ttggacagaa gatattactg gtgtaaaatc attagaggag cttcctgaaa 480
 atgcaagaca ttatgtagag cgtgtgtctc aattaacagg tatccaatta tctatgttct 540
 cagttgnccc cc 552

<210> 35
 <211> 555
 <212> DNA
 <213> *Bacillus myco?es*

<220>
 <221> misc_feature
 <222> (4)..(4)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (548)..(548)
 <223> n is a, c, g, or t

<400> 35
 ggtncgtacc cattcgttac atcttctaacc ccgattgctg gtgggtgaac agttggaact 60
 ggagttggtc ctgcgaaagt tactcgcgtt gtaggtgtat gtaaagcata tacaagccgt 120
 gtaggtgatg gtccggtccc tactgagctt catgatgaaa ttgggtcatca aattcgtgaa 180

gttggtcgtg aatacggaaac aacaactggt cgtccacgcc gcgtaggttg gttcgatagc 240
gttggtgtaa gacatgcacg tcgtgttagt gggttaacag atctatcatt aaattctatc 300
gacgttctaa caggtattcc aactcttaaa atttgtgttg cttacaaata caatggcgaa 360
gttatcgatg aagttccagc aaacttaaac attttagcga aatgtgagcc tgtatatgaa 420
gagcttccag gttggacaga agatattact ggtgtaagag cattagacga gcttcctgaa 480
aatgcacgaa aatacgtaga acgtgtttct gagttaacag gaattcaatt atctatgttc 540
tcagtgncc cccgg 555

<210> 36
<211> 546
<212> DNA
<213> Bacillus myco?es

<220>
<221> misc_feature
<222> (5)..(5)
<223> n is a, c, g, or t

<400> 36
cggtnctgac ccgttcgtta catcttctaa cccgattgct ggtggtgtaa cagttggaac 60
tggagttggt cctgcgaaag ttactcgcgt tgtaggtgtg tgtaaagcat atacaagccg 120
tgtaggtgat ggtccattcc ctactgagct tcatgatgaa attggtcac aaattcgtga 180
agttggtcgt gagtatggaa cgacaactgg tcgtccacgc cgcgtaggtt ggttcgatag 240
cgttggtgta agacatgcac gtcgtgttag tgggttaaca gatttatcat taaattctat 300
cgacgttcta acaggtattc caactcttaa aatttggtt gcttaciaat acaatggcga 360
agttatcgat gaagttccag caaacttaaa catcttagcg aaatgtgagc ctgtatatga 420
agagcttcca gggtgggaag aagatattac tgggtgtaaaa tcattagacg aacttcctga 480
aaatgcaaga aaatacgtag agcgtgtttc tgaattaaca ggaatccaat tatctatggt 540
ctcagt 546

<210> 37
<211> 581
<212> DNA
<213> Bacillus weihenstephanensis

<220>
<221> misc_feature
<222> (8)..(8)

<223> n is a, c, g, or t

<220>

<221> misc_feature

<222> (14)..(14)

<223> n is a, c, g, or t

<220>

<221> misc_feature

<222> (473)..(473)

<223> n is a, c, g, or t

<220>

<221> misc_feature

<222> (564)..(564)

<223> n is a, c, g, or t

<220>

<221> misc_feature

<222> (576)..(577)

<223> n is a, c, g, or t

<400> 37

tttttttngg aagngcgcaa ggtgttatgc ttgatatcga ccacggtaacg taccogttcg 60

ttacatcttc taaccaatt gctggtggtg taacagttgg aactggagtt ggtcctgcga 120

aagttactcg cgttgtaggt gtatgtaaag catatacaag ccgtgttggt gatgggccat 180

tcctactga acttaatgat gaaatcggtc accaaattcg tgaagttggt cgtgaatacg 240

gaacaacaac gggtcgtcca cgccgtgtag gttggttcga tagcgttggt gtaagacatg 300

cacgtcgtgt tagtggttta acagatttat cattaaactc tatcgatgta ttaacaggta 360

ttccaactgt taaaatttgt gttgcttaca aatgcaatgg cgaagttatc gatgaagttc 420

cagctaactt aaacatttta gcgaaatgtg agcctgtata tgaagagctt ccngggttga 480

cagaagatgt tactgctgtg aaatcattgg atgagcttcc tgaaaatgca agaaaatacg 540

tagagcgtgt tttctgaatt aacnggaagc caattnncaa g 581

<210> 38

<211> 572

<212> DNA

<213> Staphylococcus haemolyticus

<400> 38

caaggtgtca tgtagatat cgaccatggt acatatacctt tcgtaacttc aagtaaccct 60

gttgcaggta atgtaacagt tggtagaggt gtaggccccaa ctttcgtatc taaagtgatt 120

ggtgtatgta aagcatatac atctcgtgta ggcgatgggtc cattccctac agaattatct 180

gatgaaaatg gacatcatat tagagaagtt ggtagtgaat acggtacaac aacaggacgt 240

ccacgtcgtg taggttggtt tgactcagtt gtattacgtc actctcgtcg tgttagtggt 300
 attacagact tatctattaa ctctatcgac gtacttacag gtcttgatac agtgaagatt 360
 tgtactgctt acgaattaga tggagaagaa attacagaat atcctgctaa cttagatcaa 420
 ttacgtcgtt gtaaaccaat ctttgaagag ttaccaggat ggaagaaga tatcactggt 480
 tgccgtacat tagaagaatt accagataac gcacgtaaat acttagaacg catttctgaa 540
 ttatgtaatg tacgtatttc aatcttctca gt 572

<210> 39
 <211> 578
 <212> DNA
 <213> *Staphylococcus saprophyticus*

<400> 39
 gcaaggtgtg atgttagata tcgaccatgg tacatatcca ttcgttcatc aagtaaccca 60
 gttgcaggta atgtgactgt cgggtggcggg gtaggtccaa cattcgtctc taaagttatc 120
 ggtgtgtgta aagcctatac atcacgtgtc ggcgatggtc cattcccaac agaactatct 180
 gacgaagatg ggcaccacat ccgtgaagta ggtcgtgaat acggtacaac aacaggacgt 240
 ccacgtcgtg taggttggtt cgactcagtt gtattacgtc attctcgtcg tgcaagtggg 300
 attacagatt tatctattaa ctcaattgat gtattaacag gccttaaaga agttaaaatc 360
 tgtactgctt atgagttaga cggtaaagaa attacggaat acccagctaa cttgaaagac 420
 ttacaacgtt gtaagccaat ttttgaaaca ttaccagggt ggacagaaga tgtgacagg 480
 tgctcgttcatt tagaagaatt acctaataat gcgcgtagat acttagaacg tatttctgaa 540
 ttatgtgacg tgaagatttc aatcttctca gttggccc 578

<210> 40
 <211> 583
 <212> DNA
 <213> *Bacillus subtilis*

<220>
 <221> misc_feature
 <222> (542)..(542)
 <223> n is a, c, g, or t

<400> 40
 ctcaaggggt tatgcttgat attgaccaag ggacataccc gtttgtcact tcatccaacc. 60
 cggtcgccgg aggggtgacg atcgggttcag gcgtagggccc gacaaaaatc cagcacgtcg 120

tcggtgtatc taaagcgtac acaaccctgtg tcggtgacgg tcctttcccg actgagctga	180
aagatgaaac cggggatcaa atccgtgaag tcggacgca atacggcaca acgacaggcc	240
gtccgcgccg tgtcggctgg tttgacagcg ttgttgccg ccatgcccgc cgcgtcagcg	300
gaatcacaga tctttctctg aactcaatcg atgtgctgac tggcattgaa acattgaaaa	360
tctgtgtcgc ttaccgctac aaagggtgaag tgattgaaga attcccggca agtctgaaag	420
ctctcgcaga gtgtgaaccg gtatatgaag aaatgcctgg ctggacggaa gatatacag	480
gcgcaaaaac attaagcgat cttcctgaaa atgcgcgcc ttatctggaa cgcgtgtctc	540
anctgacagg tattccgctt tctatcttct cagtaggtcc aga	583

<210> 41
 <211> 598
 <212> DNA
 <213> *Listeria monocytogenes*

<400> 41	
tttggagggg gcgcaagggg ttatgcttga tattgatcaa ggaacatata catttgtaac	60
ttcaagtaac ccgattgctg gtggcgtaac tatcggtagt ggtgttggtc cttcaaaaat	120
caatcatgtt gttggtgtgg cgaaagctta tacaacacgt gttggtgatg gtcctttccc	180
aacagaatta tttgattcta ttggtgacac tattcgtgaa gtcggtcata aatatggtac	240
aacgactggt cgtccgcgtc gtgtaggttg gtttgatagc gtagtggttc gtcatacgcg	300
tcgtgttagt ggattaacag atttatcgtt aacactactt gatgttttga caggaattga	360
gacacttaaa atctgtgtag cttacaaatt agacggaaaa acaattacag agttcccagc	420
aagtttgaaa gatttagctc gttgcgaacc tgtttatgaa gaacttccag gctggacgga	480
agatattact ggagttacat cactagatga tcttcagtg aactgccgcc attacatgga	540
gcgtatcgcc caacttacgg gaggcaagt ttctatgttc tcagtaggtc ccagacca	598

<210> 42
 <211> 573
 <212> DNA
 <213> *Lactococcus lactis*

<220>
 <221> misc_feature
 <222> (2)..(2)
 <223> n is a, c, g, or t

 <220>
 <221> misc_feature

<222> (18)..(18)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (567)..(567)
 <223> n is a, c, g, or t

<400> 42
 tnatgcttga tattgacnag gaacataccc atttgtaact tctcaaaccc agtagctggt 60
 ggggtaacga ttggctctgg tgtgggtcca tcaaaaattt caaaagttgt tgggtgtttgt 120
 aaagcctata cttcacgtgt gggatgatgg ccattcccaa cagaactttt tgatgaagtt 180
 ggacatcaaa ttcgtgaagt aggacatgaa tatggaacaa caacaggacg tccacgctgt 240
 gttggttggg ttgactcagt cgtaatgcgt catgcaaaac gtgtttcttg cttgacaaat 300
 cttagcttga attcaattga cgttctctca ggacttgaaa cagtaaaaat ttgtgttgct 360
 tacgaacgta gtaatggtga acaaattact cattatccag catcacttaa ggaattagca 420
 gattgcaaac caatctatga agaattgcc ggatggtctg aagatattac ttcatgccga 480
 actttagaag agttaccaga agctgctcgt aactatgttc gtcgggttgg tgaactagtt 540
 ggcgtacgta tctcgacttt ctcaagtngtc ccc 573

<210> 43
 <211> 599
 <212> DNA
 <213> Enterococcus hirae

<220>
 <221> misc_feature
 <222> (551)..(551)
 <223> n is a, c, g, or t

<400> 43
 ctttttgaag gggcgcaagg ggtaatgcta gatattgacc aaggtaacct tccatttgta 60
 acctcatcta atccagttgc tgggtggtgta acgatcggtt ctggtgtggg tcctagcaag 120
 attgacaaag tagtgggtgt ttgtaaagcc tatacaagtc gtgttggtga tggtcctttc 180
 ccaacagagc ttttcgatga agtaggtgac cgcattcgtg aggttgggtca tgagtatggt 240
 acaacaacag gacgtccgag tcgagttggt tggtttgact ctgttggttat gcgccatagc 300
 cgccgtgtat ctgggattac caatctttcg cttaactcta tcgatgtggt gagcggctctg 360
 gatacagtca agatctgtgt agcctatgat ttggatggcc aaagaatcga ccactatcca 420
 gctagtttgg aacagcttaa acgttgtaag ccgatttacg aagagcttcc tggatggtct 480

gaagatatta ctggcggttcg taagttagaa gatcttccag aaaatgctcg caactatggt 540
 cggcgagtaa ncgagttggt tgggtgtacgt atttccacct tctcagtagg tccagacca 599

<210> 44
 <211> 505
 <212> DNA
 <213> Enterococcus avium

<400> 44
 cttttcgaag gtgcgcaagg tgtaatgctg gatattgatc aagggactta tccatttggt 60
 acctcttcta atccggttgc cggcggtgct acgatcggta gcggtgttgg accatcgaag 120
 attgataaag tcgtaggggt atgtaaagct tatacatcac gcgttggtga tggacctttt 180
 ccaacggaat tatttgacga agtcggcgat cagatccgcg aagttggtcg tgaatatgga 240
 acaacaactg gccgtccacg tcgagttggc tggtttgact ctgtggttat gcggcactca 300
 aaacgcgctt ctgggattac caatctatct ttgaactcaa tcgatgtgtt gagcggcttg 360
 gaaacggtca agatttgtac cgcttatgag ttagacggag aattaatcta tcattatcca 420
 gcaagcttaa aggaattgaa tcgctgcaaa ccagtttatg aagagctacc tggctggagt 480
 aaggatatta ctggctgtcg tgatt 505

<210> 45
 <211> 598
 <212> DNA
 <213> Streptococcus bovis

<400> 45
 tttttgaagg ggctcaaggt gtcattgctt atattgacca aggtacatac ccatttggtta 60
 catcttcaaa ccagttgct ggtggtgtaa ctatcggttc aggtgttggc ccaagcaaga 120
 tcaacaaagt tgttggtgta tgtaaagcct acacaagtcg tgttggtgat ggtccattcc 180
 caacagaact tctagacgaa gttggagatc gtatccgtga aatcggtcac gaatatggta 240
 caacaacagg acgtccacgt cgtgttggat ggtttgactc agttgtaatg cgtcacagcc 300
 gtcgcgtatc aggtatcaca aacttgtcac ttaactcaat cgacgttctt tcaggacttg 360
 atactgttaa ggtctgtgtg gcttacgacc ttgatggcca acgtatcgac cactatccag 420
 caagtcttga acaattgaaa cgttgtaaac caatctacga agaattgcca ggttggtcag 480
 aagacatcac aggtgccgt agcctagatg agcttccaga aaatgctcgt aactatgttc 540
 gtcgtgttgg tgaacttggt ggtgttcgca tttcaacatt ctcagttggt ccaggcca 598

<210> 46
 <211> 598
 <212> DNA
 <213> Streptococcus thermophilus

<220>
 <221> misc_feature
 <222> (508)..(508)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (569)..(569)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (593)..(594)
 <223> n is a, c, g, or t

<400> 46
 ctatttgaag gtgcgcaagg agttatgctt gatattgacc aaggaacata cccatttgta 60
 acgtcatcaa acccagttgc tgggtggtgtt acaattgggt ctggtggttg gccatctaaa 120
 attaataagg ttgtgggtgt atgtaaggcc tatacaagtc gtgtcggcga tggtcctttc 180
 ccaactgagt tgtttgatga agtgggtgaa cgtatccgtg aagttggcca tgaatatgga 240
 acaacaactg gacgtccacg tcgtgtggga tggtttgact cagtggtaat gcgtcatagc 300
 cgtcgtgtat caggtattac aaaccttagc ttgaactgta tcgacgttct ttctggtctt 360
 gatactgtga aaatttgtgt agcctacgat cttgatgggt agcgcatgga ttactatccg 420
 gctagccttg agcaattgaa acgttgtaaa ccaatttatg aagaattgcc aggttgggaa 480
 gaggatatta caggttgccg tagtttanat gagcttctctg aaaatgcccg taattatggt 540
 cgtcgtattg gtgagttggt cgggtatacnt atctctacct tctcagtagg ccnnacca 598

<210> 47
 <211> 591
 <212> DNA
 <213> Streptococcus suis

<400> 47
 cgaaggacgc aaggagttat gttggatatg accaaggtag ctatccattc gttacttctt 60
 caaaccacgt tgctggtggt gtgacgatcg gtagcgggtg cggcccaagc aagattgaca 120
 aggttggttg tgtatgtaag gcctacacta gccgtggttg tgacggacca tttccgactg 180
 aattgcacga tgaaatcgga gaccgtatcc gcgaaatcgg taaagagtag ggtacgacaa 240

ctggccgtcc acgccgtgtc ggttggtttg actcagtggg gatgcgccat agccgccgtg 300
 tgtcaggtat taccaacttg tccctcaact cgattgacgt cttgtcaggt cttgggacct 360
 tgaaaatctg cgtggcttat gacttgatg gtgagcgtat tgaccactac ccagcaagtt 420
 tggagcaact caaacgttgc aaaccaatct acgaagaaat gccaggttgg tctgaagaca 480
 tcacaggtgt acgtagcctg gatgaattgc cagaagcggc tcgcaactat gttcgtcgta 540
 tcagcgaatt ggtaggcgtt cgtatctcaa ccttctcagt aggtccagac c 591

<210> 48
 <211> 599
 <212> DNA
 <213> Bacillus pseudomyces

<220>
 <221> misc_feature
 <222> (594)..(594)
 <223> n is a, c, g, or t

<400> 48
 ctatttgaag gggcgcaagg cgtaatgctt gatattgatc aaggtaacgta tccattcggt 60
 acatcttcta acccagttgc tgggtggtga acaatcggtt ctggagttgg tccttctaaa 120
 atcaatcgtg tagtaggcgt atgtaaagca tatacaagcc gtgttggtga cgggccattc 180
 cctactgaac ttaatgatga aattggccat caaatcgtg aagttggtcg tgaatatggt 240
 acaacaacag gtcgtccacg tcgcgtaggt tggtttgaca gcgttggtgt aagacatgca 300
 cgccgtgtga gtggtttaac agatttatct ttaaactcta tcgacgtatt aacaggtatt 360
 ccaactgtga aaatctgtat tgcatataag tataatggag aagttctgga tgaagttcca 420
 gcaaacttaa acattttagc aaaatgtgag cctgtatatg aagagcttcc aggttgga 480
 gaagatatta ctggtgtaaa atcattagag gagcttctg aaaatgcaag acattatgta 540
 gagcgtgtgt ctcaattaac aggtatccaa ttatctatgt tctcagtagg gccngacca 599

<210> 49
 <211> 604
 <212> DNA
 <213> Staphylococcus capitis capitis

<220>
 <221> misc_feature
 <222> (528)..(528)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (530)..(530)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (570)..(570)
 <223> n is a, c, g, or t

<400> 49
 ctcttcgagg agctcaaggt gtcattgtag acatcgacca tggtagttac ccattcgtta 60
 cgtcaagtaa ccaggttgct ggtaattgtca cagtaggtac aggtgtagggt cctacatcag 120
 tttctaaagt catcgggtgta tgtaaattcat atacgtcacg tgtagggtgat ggtccattcc 180
 ccacagaatt attcgtatgaa gatgggtcatc acattagaga agtaggtcgt gaatatggta 240
 caacaacagg acgtccacgc cgtgtagggtt gggttgactc agtgggtacta cgtcattcac 300
 gtcgcgtaag tggtagtcaca gatctttcaa tcaactctat cgacgtttta acaggttttag 360
 atacagttaa aatttggtaca gcatatgagt tagatggcga agaatcact gaatacccag 420
 ctaacttaga tcaattaaga cgctgtaaac caatcttcga agaacttcca ggttggacag 480
 aagatatcac agggctgccc cagtttagaa gaactccctg aaaatgcncn ccaaatacct 540
 agagcgtatt tcaaaattat gtggcgtaacn catttcaatc cttctcagta ggggccctga 600
 cccc 604

<210> 50
 <211> 597
 <212> DNA
 <213> Staphylococcus sciuri

<220>
 <221> misc_feature
 <222> (563)..(563)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (571)..(571)
 <223> n is a, c, g, or t

<400> 50
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 acttcaagta atccaattgc aggtaacgtt acagtaggtg gcggtgttgg tccaacatac 120
 gtatctaaag taattgggtgt atgtaaagct tatacatctc gtgtaggaga cgggtccattc 180

ccaacagaat tatttgatga agatgggtcac catatccgtg aagtaggtcg tgaatacggg	240
aoaacaactg gaagaccacg tcgtgtaggt tggtttgact cagtagttct acgtcactca	300
cgccgtgtaa gtggtattac agatttatca atcaactcaa ttgacgtatt aacaggatta	360
aaaacagtta aaatctgtac agcatacgaa attgatgggtg ttgaaatcac tgaatatcca	420
gcaaacttaa acgaattaga acgttgtaaa ccaatctttg aagaactacc aggttgggaa	480
gaagacatta caggatgccg ttcactagaa gaattaccag ataacgcacg tcgtttttta	540
aaacgcattct ctgaattatg tancgttaaa nttctatctt ctcagtaggt ccaggtc	597

<210> 51
 <211> 605
 <212> DNA
 <213> Staphylococcus warneri

<400> 51	
ctttttgaag gagcgcaagg tgtgatgtta gacatcgacc acggtacata tccattcgtc	60
acttcaagta acccagtagc aggtaacgtt actgtaggta ctggtgtagg tccaacatac	120
gtatcaaaaag tcattggtgt atgtaaagct tatacatcac gtgttggtga tgggtccattc	180
cctacagaat tatttgatga agatgggtcat cacattagag aagttgggtcg tgaatacggg	240
acaacaactg gtcgtccacg tcgtgtaggt tggttcgact cagtagtatt acgtcattca	300
cgccgtgtaa gtggtattac agacttatca atcaactcaa ttgatgtgtt aactggctta	360
gatacagtta aaatctgtac agcatatgaa ttagatggta aagaaattac tgaatatcca	420
gctaacctag atcaattaca acgttgtaaa ccaatcttcg aagaattacc tgggtggaca	480
gaagatatta cagggtgccg tacttttagaa gagcttcctg aaaatgcacg caaatattta	540
gaacgtatatt ctgaattatg tggcgtagct atttcaatct tctcagttgg tcctggccag	600
ggcga	605

<210> 52
 <211> 599
 <212> DNA
 <213> Staphylococcus lugdunensis

<400> 52	
ttctttgaag gagctcaagg tgttatgtta gatattgatc atggtacata tcctttcgtc	60
acatcaagca atcctgtagc cggcaatgtc actgttggtgta cagggtgtagg tccaaccttc	120
gtttctaaag taattggtgt gtgtaaagca tacacatctc gcgtaggcga tggtcctttc	180

ccaactgaac tatttgatga agatgggcac catattagag aggttggtcg tgaatatggt	240
acgacgacag gacgtccacg tcgctgggtg tggtttgatt cagtcgtgct acgtcactca	300
cgctcgtgta gtggtattac agacttatct attaactcta ttgatgtact aacagggtta	360
gatacggtaa aaatttgtag agcttatgag ttagatggag aagaaattac ggagtatcca	420
gctaaccttg atcaattaaa acgttgtaaa ccaatctttg aagaattacc tggttggaca	480
gaagatatta caggctgtcg ttcattagaa gcattgcctg ataatgcacg tcgctattta	540
gaacgtattt cagaattatg cggcgttcat atttcaattt tctcagtagg gccagacca	599

<210> 53
 <211> 599
 <212> DNA
 <213> *Staphylococcus gallinarum*

<400> 53	
ctttttgaag gtgcgcaagg cgttatgtta gatatcgacc atggtacata cccatttggt	60
acttctagta atccagttgc aggtaacgta actgtagggtg gcggtgttg accaacattc	120
gtatcaaaaag taattggcgt atgtaaagcc tatacatcac gtgttggtga cggcccatc	180
ccaactgaat tatttgatga agatggacat catatccgtg aagttggccg cgaatatggt	240
acaacaacag gacgtccacg tcgtgtgggt tggtttgact ctgttgatt acgtcattca	300
cgcctgcaa gtggtatcac agatttatct atcaactcta ttgacgtatt aacagggtctt	360
gaaaatgtta agatttgtag tgcatacgaa ttagatggag aagaaatcac tgaataccca	420
gcaaacttaa aggacttaca acgttgtaaa ccaatctttg aaacattacc aggttggaca	480
gaagatgtca caagctgtcg ttcactagat gaattaccag ataatgcacg cagatattta	540
gagcgcattt ctgaaccatg taacgtgaag atttcaatct tctcagtagg gccagacca	599

<210> 54
 <211> 600
 <212> DNA
 <213> *Staphylococcus schleiferi schleiferi*

<400> 54	
gacctggacc aactgagaag atagaaatat ggacgttaca taattctgaa atacgtctta	60
agtaacggcg tgcattttgt ggtagttcgt ctaaactacg tacacctgta atatcttcag	120
tccaacctgg taatgtttca aagataggtt tacaacgttt taagtcgttt aagtttgctg	180
ggatttcgt aatctctttt ccatctaatt cataagctgt acagatttta acctcttcta	240
agccagttaa gacgtcgata gagttgattg ataaatctgt aatcccactt acacgacgag	300

agtgacgtaa tacaacggag tcaaaccaac ctacacggcg tggacgacct gttgttgtgc	360
catattcacg tccgatttca cgaatatggg gcccttggtc atcaaataat tctgttggga	420
atggcccatc acctacacgt gaagtgtatg ctttacatac gccaaactact tttgatacat	480
ttgttggccc tacaccagca ccaactgtca cgttaccgcg tacagggtta cttgatgtta	540
caaaaggata tgttccgtga tcgatgtctg acatcacccc cttgagcccc ttcaaagaga	600

<210> 55
 <211> 599
 <212> DNA
 <213> Staphylococcus capitis ureolyticus

<400> 55	
gaccaggccc aactgagaag attgaaatgt gtacgccaca taattctgaa atacgctcta	60
ggatatttgcg tgcattttca gggagttctt ctagactgcg acaacctgtg atatcttctg	120
tccaacctgg aagttcttcg aagattgggt tacagcgtct taattgatct aagttagctg	180
ggatattcagt gatttcttcg ccatctaact catatgctgt acaaatttta actgtatcta	240
aacctgttaa aacgtcgata gagttgattg aaagatctgt gataccactt acgcgacgtg	300
aatgacgtaa tactactgag tcgaaccaac ctacacggcg tggacgtcct gttgttgtac	360
catattcacg acctacttct ctaatgtgat gaccatcttc atcgaataat tctgtaggga	420
atggaccatc acctacacgt gacgtatatg atttacatac accgatgact ttagaaactg	480
atgtaggacc tacacctgta cctactgtga cattaccagc aactgggtta cttgacgtaa	540
cgaatggata tgtaccgtgg tcgatgtcta acatgacacc ttgcgcacct tcaaataaa	599

<210> 56
 <211> 599
 <212> DNA
 <213> Staphylococcus cohnii urealyticum

<400> 56	
ctcgttgaag gtgcacaagg cgttatgtta gatatcgacc acggtacata cccattcggt	60
acgtcaagta acccagttgc aggtaatgtc actgtcgggt gtggtgttgg tccaacatac	120
gtatctaaag tcattggcgt atgtaaagct tatacatcac gtgtcgggtga tggcccatc	180
ccaacagaac tatttgatga tgatggacac cacatccgtg aaattggccg tgagtacggt	240
acaactactg gacgtccacg tcgtgtaggt tggttcgatt cagttgtatt acgtcactct	300
cgtcgtgcga gtggtattac tgatttatca atcaactcta tcgatgtctt aacaggcctt	360

aaagaagtga agatttgtac ggcgtatgaa ttggacggta aagaaattac tgaatatcca 420
gcgaatttaa aagacttaca acgttgtaag ccaatctttg aaacattacc tggttggaca 480
gaagatgta caggttgctg ctcatatgat gagctgccag acaatgcacg tagatattta 540
gaacgtatct ctgaattatg tgacgttcaa atttcaatct tctcagtagg gcctgacca 599

<210> 57
<211> 599
<212> DNA
<213> Staphylococcus xylosus

<400> 57
ctttttgaag gtgctcaagg tgtaatgcta gatatcgatc atggtactta cccattcggt 60
aqttaacgta acccagttgc cggtaacggt actgttggtg gcggtgtagg tccaacattc 120
gtatctaaag tcattggtgt atgtaaggca tatacatcac gtgtaggcga tggtcctttc 180
ccaactgaac tatttgatga tgacggggcac catatccgtg aagtaggtcg tgaatacggg 240
acaactacag gtgcgtccacg ccgtgtaggt tggttcgatt cagttgtatt acgtcactct 300
cgccgtgcga gtggtattac agacctatca atcaactcta ttgatgtggt aacaggtcta 360
aaagaagtta aaatctgtac tgcctatgag ttagacggta aagaaatcac tgaatatcca 420
gcaaacttga aagacttaca acgttgtaag ccaatctttg aaacattgcc tggttggaca 480
gaagatgtaa ctggttgta atcattagat gaattacctg ataatgcacg tagatactta 540
gaacgtatat ctgaactaag tgatgttaag atttctatct tctcagtagg gccagatca 599

<210> 58
<211> 599
<212> DNA
<213> Staphylococcus simulans

<400> 58
ctatttgaag gagcgcaagg gggtatgtta gacatcgacc atggtacata cccattcggt 60
acatcaagta acccgattgc tggtaacggt actgtcggcg gcggtatcgg accaacaatca 120
gtatctaaag taatcgggtgt atgtaaagcg tatacgtcac gtgtaggtga tggtcattc 180
cctactgaat tattcgatga agatgggtcat catatccgtg aagtaggtcg tgaatatggt 240
acaactacag gacgcccacg tcgtgtcggc tggttcgact cagtggtatt acgtcattca 300
cgctgtgtaa gtggtattac tgacttatct atcaactcaa tcgacgtttt aactgggtta 360
gatacagtta aaatctgtgt tgcgtatgag ttagatgggtg aagaaatcac tgaataccca 420
gcaaacttaa acgcgttgaa ccgttgtaaa ccaatttacg aagaattacc aggttggtct 480

gaagatatta caggcgtaca atcattagaa gaattaccag ataacgcacg tcgttactta 540
gaacgtatatt ctgagttatg taacgtaggt atctcaatct tctcagttgg tccagggtca 599

<210> 59
<211> 598
<212> DNA
<213> *Staphylococcus cohnii cohnii*

<400> 59
tatttgaagg tgcacaagga gtaatgcttg atatcgatca tgggtacttat ccgttcgtca 60
cttcaagtaa cccgattgcc ggtaacgtaa cagttggtac tgggtgtaggt ccaacgtttg 120
tagataaagt tgttggtgta tgtaaagctt acacatcacg tgtaggggat ggaccattcc 180
caactgaatt atttgatgaa gatgggtcatc atattcgtga agtggggtcgt gaatatggaa 240
cgactacagg acgtccacgt cgtgtaggtt ggtttgactc tgttggtatta cgccattctc 300
gccgtgcaag tgggtattacg gacttggtcaa ttaactctat tgacgtatta actgggttag 360
aaactgttaa gatttggtaca gcatatgaat tggatggaaa agagattaca gaatatccag 420
cgaatttaaa tgaactaaat cgttgtaaac cgattttcga agaattacca ggatggactg 480
aagatgtgac ttcatgtaag tcattagacg agctacctga taacgcacgc cgttacttag 540
agcgtatttc ggagttatgt aatgttaaga tttctatctt ctcagtaggt ccagacca 598

<210> 60
<211> 599
<212> DNA
<213> *Staphylococcus auricularis*

<220>
<221> misc_feature
<222> (361)..(361)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (484)..(484)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (541)..(541)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (553)..(553)

<223> n is a, c, g, or t

<400> 60
ctatttgaag gagctcaagg tgtgatgtta gatatcgacc atggtacgta cccatttggt 60
acatctagta accctgttgc tggtaacgtg acagtgggtg caggtgtagg tccaacgttt 120
gtctctaaag tgattggtgt atgtaaagcc tatacatcac gtgtcgggtga tgggccattc 180
ccaactgaat tatttgatga tgatgggtcac cacatccgtg aagtcggaca tgaatacggc 240
acaacaacag gacgccaag acgtgtcggc tgggttcgact ctgtgggtatt acgtcactct 300
cgccgtgtga gcggtattac agacctttct attaaactcta ttgatgtgtt aactgggtta 360
natacagtta aaatttgtac cgcatacgaa ttagatgggg aagaaattac agagtaccca 420
gcaaacttaa acgatctaaa acgctgcaaa ccaatctttg aagaacttcc aggttggaaac 480
gaanatatta caggttgccg cagcttagaa gaattacctg acaatgcacg tcactactta 540
naacgcattg canaactttg tgacgtaaac atttcaatct tctcagttgg gccagacca 599

<210> 61
<211> 599
<212> DNA
<213> *Staphylococcus caseolyticus*

<400> 61
cttttcgaag gggcgcaagg agtaatgctt gatatcgatc atggtactta tccgttcgtc 60
acttcaagta acccgattgc cggtaacgta acagttggta ctggtgtagg tccaacgttt 120
gtagataaag ttgttggtgt atgtaaagct tacacatcac gtgtaggaga tggaccattc 180
ccaactgaat tatttgatga agatgggtcat catattcgtg aagtgggtcg tgaatatgga 240
acgactacag gacgtccacg tcgtgtaggt tggtttgact ctgttggtatt acgccattct 300
cgccgtgcaa gtgggtattac ggacttggtca attaaactcta ttgacgtatt aactgggtta 360
gaaactgtta agatttgtac agcatatgaa ttggatggaa aagagattac agaatatcta 420
gcgaatttaa atgaactaaa tcgttgtaaa ccgattttcg aagaattacc aggatggact 480
gaagatgtga cttcatgtaa gtcattagac gagctacctg ataacgcacg ccgttactta 540
gagcgtattt cggagttatg taatgttaag atttctatct tctcagttgg tccagacca 599

<210> 62
<211> 599
<212> DNA
<213> *Listeria innocua*

<400> 62

cttttcgaag gagcacaagg gggttatgctt gatattgatac aaggaacata tccatttgta	60
acttcaagta atccgattgc tgggtggcgta acaattggta gcggtggttg cccatcgaaa	120
atcaatcatg ttgttggtgt tgcaaaagca tatacaactc gtgttgagaga tggtcctttc	180
ccaactgaat tatttgattc tattggtgac actatccgtg aagttggcca tgaatatggt	240
acaactactg gtcgtccgcg tcgtgtaggt tggtttgata gcgtggttgt tcgtcatgct	300
cgtcgtgtga gcggaactaac aggtttatcc ttaacgctac tggacgtttt gacagggatt	360
gaaacactta aaatctgtgt agcgtacaag ttagacggaa aaacaattac agaattcccg	420
gcaagcttga aagacttagc tcgttgtgaa cctgtttatg aagaactgcc tggttggaca	480
gaagatatta ctgaagtga atcattagat gacctaccag taagttgtcg tcattacatg	540
gaacgcattg ctcaacttac aggtgtgcaa gtttctatgt tctcagtagg gcctgatca	599

<210> 63
 <211> 469
 <212> DNA
 <213> Escherichia coli

<400> 63	
ctatttgaag gggcgcaagg aaaaaggatt gtcgatgcat aacgcctccg gattgactct	60
ggcttaaagc gtagtcagtg gaggagataa caaattcatt ttacaaaaa cttaaaccatg	120
aagggggaga cgctttctcc cccttagttt tcaggccttc tcaagcatgg cgtgcttctg	180
caggctctgg atactcagcg ttaagctcat cagacaattt tcaagcttat cggcgttgac	240
ggtaataaca gtcgggcaat catggtgccc actcatcaaa catactgcgg ctgtcgctaa	300
tgcttcttca gcatgatgaa gagcactcca ctcttctga tccagatgaa gattcaaccg	360
cagcgattta tcgtgcagtt cgcgattcag tttaaaaaag ttatctcgta gatgattgct	420
ttcgtgacg gacatgtatc cttttgcctt tctcagttgg gccagacca	469

<210> 64
 <211> 460
 <212> DNA
 <213> Bacillus anthracis

<220>
 <221> misc_feature
 <222> (2)..(2)
 <223> n is a, c, g, or t

 <220>
 <221> misc_feature

<222> (5)..(5)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (15)..(15)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (18)..(18)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (26)..(26)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (440)..(440)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (449)..(449)
 <223> n is a, c, g, or t

<400> 64
 anttnggggca tgggnccntc tttatnagca gcatcgataa ccattttttac aagacgtaaa 60
 atagataggt tatatgggtg gtataagtaa gatacttggt cgttcatacg gtctgcagcc 120
 attgtgtatt gaattaagtc atttgttccg atagagaaga aatcaacttc ttttgcgaa 180
 tgatctgcta atactgctga agctgggatt tcaaccatca taccaacttc aatagaatca 240
 gaaacagttg taccacttc tacaagtttc gctttttctt ctaataagat cgcttttgct 300
 tgacggaact catcaagagt tgcaatcatt gggaacataa tttttaagtt accgtatacg 360
 ctagcacgaa gtaatgcacg aagttgtgta cggaacacat cttgctcatc aagacataag 420
 cgaattgcac ggtagccan gaacggatnt ttttctttaa 460

<210> 65
 <211> 444
 <212> DNA
 <213> Bacillus anthracis butare

<220>
 <221> misc_feature
 <222> (1)..(1)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (14)..(14)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (19)..(19)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (22)..(22)
 <223> n is a, c, g, or t

<400> 65
 ncttggcagg gccntcttna tncgcagcat cgataaccat ttttacaaga cgtaaaatag 60
 atagggttata tgggttggtat aagtaagata cttgttcggtt catacgggtct gcagccattg 120
 tgtattgaat taagtcattt gttccgatag agaagaaatc aacttctttt gcgaattgat 180
 ctgctaatac tgctgaagct gggatttcaa ccatcatacc aacttcaata gaatcagaaa 240
 cagttgtacc cacttctaca agtttcgctt tttcttctaa taagatcgct tttgcttgac 300
 ggaactcatc aagagttgca atcattggga acataatttt taagttaccg tatacgctag 360
 cacgaagtaa tgcacgaagt tgtgtacgga acacatcttg ctcatcaaga cataagcgaa 420
 ttgcacggta gcccaagaac ggat 444

<210> 66
 <211> 457
 <212> DNA
 <213> Bacillus anthracis Sterne

<220>
 <221> misc_feature
 <222> (10)..(11)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (437)..(437)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (446)..(447)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (451)..(451)

<223> n is a, c, g, or t

<400> 66
actgcgcatt ngccttcttt atgagcagca tcgataacca tttttacaag acgtaaaata 60
gataggttat atggttggta taagtaagat acttggtcgt tcatacgggc tgcagccatt 120
gtgtattgaa ttaagtcatt tgttccgata gagaagaaat caacttcttt tgcgaattga 180
tctgctaata ctgctgaagc tgggatttca accatcatat caacttcaat agaatacagaa 240
acagttgtac ccacttctac aagtttcgct ttttcttcta ataagatcgc ttttgcttga 300
cggaactcat caagagttgc aatcattggg aacataattt ttaagttacc gtatacgcta 360
gcacgaagta atgcacgaag ttgtgtacgg aacacatctt gctcatcaag acataagcga 420
attgcacggt agcccangaa cggaatnttt ntcttaa 457

<210> 67
<211> 457
<212> DNA
<213> Bacillus anthracis

<220>
<221> misc_feature
<222> (1)..(2)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (4)..(5)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (15)..(15)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (23)..(23)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (437)..(437)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (445)..(445)
<223> n is a, c, g, or t

<400> 67

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nncnngcatg ggccntcttt atnagcagca tcgataacca tttttacaag acgtaaaata      60
gataggttat atggttggtgta taagtaagat acttggttcgt tcatacgggc tgcagccatt    120
gtgtattgaa ttaagtcatt tgttccgata gagaagaaat caacttcttt tgcgaattga      180
tctgctaata ctgctgaagc tgggatttca accatcatat caacttcaat agaatacagaa     240
acagttgtac ccacttctac aagtttcgct ttttcttcta ataagatcgc ttttgcttga      300
cggaactcat caagagttgc aatcattggg aacataattt ttaagttacc gtatacgcta      360
gcacgaagta atgcacgaag ttgtgtacgg aacacatctt gctcatcaag acataagcga      420
attgcacggt agcccangaa cgganctttt ttcttta                                457

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<210> 68
<211> 455
<212> DNA
<213> Bacillus anthracis Coda-Cerva

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<220>
<221> misc_feature
<222> (2)..(3)
<223> n is a, c, g, or t

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<220>
<221> misc_feature
<222> (10)..(10)
<223> n is a, c, g, or t

```

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<220>
<221> misc_feature
<222> (13)..(13)
<223> n is a, c, g, or t

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<220>
<221> misc_feature
<222> (437)..(437)
<223> n is a, c, g, or t

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<220>
<221> misc_feature
<222> (447)..(447)
<223> n is a, c, g, or t

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<220>
<221> misc_feature
<222> (451)..(451)
<223> n is a, c, g, or t

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<400> 68
anntggcatn ggncttcttt atgagcagca tcgataacca tttttacaag acgtaaaata      60
gataggttat atggttggtgta taagtaagat acttggttcgt tcatacgggc tgcagccatt    120

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gtgtattgaa ttaagtcatt tgttccgata gagaagaaat caacttcttt tgcgaattga	180
tctgctaata ctgctgaagc tgggatttca accatcatat caacttcaat agaatacagaa	240
acagttgtac ccacttctac aagtttccgt ttttcttcta ataagatcgc ttttgcttga	300
cggaactcat caagagttgc aatcattggg aacataattt ttaagttacc gtatacgcta	360
gcacgaagta atgcacgaag ttgtgtacgg aacacatctt gctcatcaag acataagcga	420
attgcacggt agccocangaa cggatcnttt ntctt	455

<210> 69
 <211> 458
 <212> DNA
 <213> Bacillus anthracis

<220>
 <221> misc_feature
 <222> (4)..(5)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (17)..(17)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (22)..(22)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (25)..(25)
 <223> n is a, c, g, or t

<400> 69	
tttnnggcat ggcgcctct tnatnagcag catcgataac catttttaca agacgtaaaa	60
tagatagggtt atatggttgg tataagtaag atacttggtc gttcatatcg tctgcagcca	120
ttgtgtattg aattaagtca ttgttccga tagagaagaa atcaacttct tttgcgaatt	180
gatctgctaa tactgctgaa gctgggattt caaccatcat accaacttca atagaatcag	240
aaacagttgt acccacttct acaagtttgc ctttttcttc taataagatc gcttttgctt	300
gacggaactc atcaagagtt gcaatcattg ggaacataat ttttaagtta ccgtatacgc	360
tagcacgaag taatgcacga agttgtgtac ggaacacatc ttgctcatca agacataagc	420
gaattgcacg gtagcccaag aacggatctt tttcttta	458

<210> 70
 <211> 445
 <212> DNA
 <213> *Bacillus cereus*

<400> 70
 gccttccttta tgagcagcat cgataacat ttttacaaga cgtaaaatag atgggttata 60
 tggttggtat aagtatgata cttgttcgtt catacggctt gcagccattg tgtattggat 120
 taaatcattt gttccgatag agaagaagtc aacttctttc gcgaattgat ctgctaatac 180
 tgctgaagct gggatttcaa ccatcatacc aacttcaata gaatcagaaa cagttgtacc 240
 cgcttctaca agtttcgctt tctcttctaa taaaatcgct ttcgcttgac ggaactcatc 300
 aagagttgca atcattggga acataatttt taagttaccg tatacgctag cacgaagtaa 360
 tgcacgaagt tgtgtacgga acacatcttg ctcatcaaga cataagcgaa ttgcacggta 420
 tccaagaac ggatcattct cgta 445

<210> 71
 <211> 438
 <212> DNA
 <213> *Bacillus cereus*

<400> 71
 ccatttcctt ctttatgagc agcatcgata accattttta caagacgtaa aatagatggg 60
 ttatatgggtt ggtataagta tgatacttgt tcgttcatac ggtctgcagc catttgttat 120
 tggattaaat catttggtcc gatagagaag aagtcaactt ctttcgcgaa ttgatctgct 180
 aatactgctg aagctgggat ttcaaccatc ataccaactt caatagaatc agaaacagtt 240
 gtacccgctt ctacaagttt cgctttctct tctaataaaa ttgctttcgc ttgacggaac 300
 tcatcaagag ttgcaatcat tgggaacata atttttaagt taccgtatac gctagcacga 360
 agtaatgcac gaagtttgtt acggaacaca tcttgctcat caagacataa gcgaattgca 420
 cgatatccca agaacgga 438

<210> 72
 <211> 445
 <212> DNA
 <213> *Listeria monocytogenes*

<220>
 <221> misc_feature
 <222> (436)..(436)
 <223> n is a, c, g, or t

```

<400> 72
gccctcttta tgagaagcat caattacat ttttactaaa cgtaagatgg atggattgta 60
tggttggttaa aggtaagaaa cgcgttcgtt catacgggcc gcagccattg tatactgaat 120
taagtcattt gttccgatag agaagaaatc aacttctttt gcaaattgat cagcaagaac 180
tgcagcggca ggaatttcaa tcataattcc aagttcgatg gaatcagata cttctgttcc 240
agcagctttt agttttgctt tctcatctag taaaatatca cgtgcttgac ggaattcatt 300
tactgttgca atcatcggga acataatttt taagttacca tatacacttg cgcgaaagtaa 360
ggcgcggaagt tgcgtacgga ataattcttc attcgcaaaa caaagacgaa ttgcgcggaa 420
tccaagaac ggatcnttct cctta 445

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<210> 73
<211> 444
<212> DNA
<213> Streptococcus pneumoniae

```

```

<220>
<221> misc_feature
<222> (423)..(423)
<223> n is a, c, g, or t

```

```

<220>
<221> misc_feature
<222> (425)..(425)
<223> n is a, c, g, or t

```

```

<220>
<221> misc_feature
<222> (442)..(442)
<223> n is a, c, g, or t

```

```

<400> 73
cgcgtgagct gctttgatcc attgttaatc aagcgtagga ttgatgggtt gtatggtttg 60
taaaggatatg aaacttggtc gttcatcagg tctgctgcc a ttgtatattg gatcaagtca 120
tttgtaccaa ttgagaagaa gtcaacttct ttagcaaatt ggtctgcaag catagccgct 180
gcaggaatct cgatcatgat accaacttga atgttatccg caactgcaac accttcagca 240
agaagggttg ctttttcttc atcaaagact gctttcgctg cacggaattc tttcaagagc 300
gcaaccattg ggaacatgat acgcaattga ccgtgaacag acgcacgaag aagagcacgg 360
atttgtgtgc ggaacatagc atctccagtc tcagagatag agatacgaag agcacggaat 420
ccnangaacg gatccttttt cnta 444

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<210> 74
 <211> 441
 <212> DNA
 <213> Streptococcus pyogenes

<220>
 <221> misc_feature
 <222> (419)..(419)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (431)..(431)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (436)..(436)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (439)..(439)
 <223> n is a, c, g, or t

<400> 74
 tgcgctgctt tgatacattg ttgatcaaac gtaatattga tgggttggtat ggttggtaaa 60
 ggtatgatac ttgttcgttc atacggctctg ctgccatagt gtattggata aggtcgtttg 120
 ttccaattga gaagaaatca acttccttag caaattggtc tgcaagcata gcagctgcag 180
 gaatctcaat catgatacca acttggtatgt catcagcaac cgcaacgcct tctgcaagca 240
 agtttgcttt ttcttcgtca aagactgctt ttgcagcacg gaattcttta agaagcgcaa 300
 ccattgggaa cataatacga agttgtccgt gaacagaggc acgaagaagc gcacgcattt 360
 gtgtgcggaa catggcatcc ccagtttcag agatggaaat acgaagagca cggaaaccna 420
 agaacggatc nttttncnt a 441

<210> 75
 <211> 440
 <212> DNA
 <213> Streptococcus agalactiae

<220>
 <221> misc_feature
 <222> (431)..(431)
 <223> n is a, c, g, or t

<220>

<221> misc_feature
 <222> (438)..(438)
 <223> n is a, c, g, or t

<400> 75
 gagcagcttt gataacgttg ttaatcaaac gaaggattga tggattgtat ggttgataga 60
 ggtatgaaac ttgctcattc atacgggtccg cagccattgt gtattggata agatcattag 120
 taccaattga gaagaaatca acttcttttg caaattggtc tgcaagcata gctgccgctg 180
 ggatttcaat cataatacca acttcaatgc cttcagctac tgctacaccg tcagctaaca 240
 agttcgcttt ctcttcttca aatatagctt tagcagcacg gaattcttta agcaaagcaa 300
 ccattgggaa catgatgcgt agctgtccat gaactgaagc acgaagaagt gctcggattt 360
 gtgtgcggaa cattgcatca ccagtttcag aaattgaaat acgcaatgca cggaatccca 420
 agaacggatc ntttttonta 440

<210> 76
 <211> 439
 <212> DNA
 <213> Streptococcus mutans

<400> 76
 tgagcagcct taacccatga tcaaccaagc gaagaatgga tggattataa ggttggtaga 60
 ggtatgatac ttgttcattc atacgggtcag cagccatggt gtattgaata aggtcatttg 120
 taccgattga gaagaaatca acttccttag caaattggtc agccaacatt gcagctgcag 180
 gaatttcaat catgatacca acttgatat catctgaaac agcaacgcct tcagctttaa 240
 gattagcctt ttcttcttcc agaatacctt tagctttacg gaactcattg agcaaagcta 300
 ccattgggaa catgatacgc aactgaccat gaacagaagc acgcaaaagg gcacgcaact 360
 gtgtgcggaa catctgattg cctgtttctg agattgaaat acgaagtgca cgaaaaccaa 420
 agaacggatc attctctta 439

<210> 77
 <211> 445
 <212> DNA
 <213> Enterococcus faecalis

<220>
 <221> misc_feature
 <222> (436)..(436)
 <223> n is a, c, g, or t

<400> 77

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cgctcgtgtgc tgcatacaatt acatttttta ttaaaccgtaa gattgatggg ttgtatgggt    60
gggtataagta agaaacgcgt tcgttcatac ggtctgccgc cattgtgtat tggattaagt    120
cgtttggttcc aacactaaag aagtctactt ctttggcaaa tttatcagct aatacggcag    180
ctgctggaat ttcaatcata atacctactt ggatatcggt tgaaacttca acaccttcgt    240
tgactaattt ttgtttttcg tcttcaaaga ttgctttcgc tgctctaaat tctttcaaag    300
tagcaaccat tgggaacatg atacgtaagt taccatgaac agacgcacgt aataatgcac    360
gcatttgtgt acggaacatg ccgtcaccta gttctgataa gctaatacgt aatgcacggt    420
aaccacaagaa cggatnattc tcgta                                           445

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```

<210> 78
<211> 448
<212> DNA
<213> Staphylococcus aureus

```

```

<220>
<221> misc_feature
<222> (1)..(2)
<223> n is a, c, g, or t

```

```

<220>
<221> misc_feature
<222> (6)..(6)
<223> n is a, c, g, or t

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<220>
<221> misc_feature
<222> (438)..(438)
<223> n is a, c, g, or t

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<220>
<221> misc_feature
<222> (441)..(441)
<223> n is a, c, g, or t

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<400> 78
nnccntctt atgtgacgct tcaataactt gtttaactaa acgtaagatt gaagggttat    60
atgggttggt tagatatgat acacgctctg acatacggtc agcagctaata gtgtattgaa    120
ttaaatacatt tgtaccgata ctgaagaaat ctacttcttt agcaaagaca tcagctaata    180
ctgctgttgc aggtatctct accatgattc ctaattctat atcatccgaa atgtcatgac    240
cttcattttt aagggtttct ttttcttcta ataatatagc ttttgcttct cttaaattcgt    300
taattgttgc aaccattggg aacatgatat ttaacttacc ataaactgat gcacgtaata    360
atgcacgtag ctgtgggtctg aaaatatctt gttgcgcaag gcataaacga atcgcacggt    420

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aacccaagaa cggatccntt ntccttaa

448

<210> 79
<211> 443
<212> DNA
<213> *Staphylococcus epidermidis*

<220>
<221> misc_feature
<222> (434)..(434)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (439)..(439)
<223> n is a, c, g, or t

<400> 79
cttctttatg agaagcttca ataacttggt taactaatcg taaaattgaa ggattatatg 60
gttgatataa gtatgaaact cgttcagaca tacggtcagc agctaattgtg tattgaatta 120
agtcattcgt tcctatacta aagaaatcta cttcttttagc aaatacatca gcaagtgccg 180
cggtagctgg aatttcaacc ataataccta attcaatata atctgaaact tcgtaacctt 240
cgccaagaag attttctttc tcttcaagaa gcattgattt agcgtcacgg aattctttaa 300
ttgttgctac cattgggaac ataatatcca atttccata gactgaagca cgtagtaatg 360
cacgtaattg tgggtctaaag atttccgggt gtgctaaaca taaacgtatc gcacgataac 420
ccaagaacgg atcnttctnc gta 443

<210> 80
<211> 440
<212> DNA
<213> *Bacillus thuringiensis* serovar *israelensis*

<220>
<221> misc_feature
<222> (437)..(437)
<223> n is a, c, g, or t

<400> 80
ctttatgagc agcatcgata accattttta caagacgtaa aatagatggg ttatatgggt 60
gggtataagta tgatacttgt tcgttcatac ggtctgcagc cattgtgtat tggattaaat 120
cattcgttcc gatagagaag aaatcaactt ctttcgcgaa ttgatctgct aatactgctg 180
aagctgggat ttcaaccatc ataccaactt caatagaatc agaaacagtt gtacccgctt 240

ctacaagttt cgctttctct tctaataaaa tcgctttcgc ttgacggaac tcatcaagag 300
 ttgcaatcat tgggaacata atttttaagt tgccgtatac gctagcacga agtaatgcac 360
 gaagttgtgt acggaacaca tcttgctcat caagacataa gcgaattgca cggatatcca 420
 agaacggatc atttctntta 440

<210> 81
 <211> 440
 <212> DNA
 <213> Bacillus thuringiensis serovar kurstaki

<400> 81
 gccattttcc ttctttatga gcagcatcga taaccatttt tacaaggcgt aaaatagatg 60
 gattatacgg ttggtataag taagatacac gttcattcat acggtctgca gccattgtgt 120
 attggattag gtcgtttggt ccgatagaga agaaatcaac ttcttttgca aactgatctg 180
 ctaatactgc agaagcggga atttctacca tcatacctac ctcaatagca tcagaaacag 240
 ttgtaccagc ttgaacaagt ctttctttct cttctaataa aattgctttt gcttgacgga 300
 attcatcaag agttgcaatc attgggaaca taatttttaa attaccatat acgcttgacac 360
 gaagcaatgc acgaagttgt gtacggaaca catcttggtc ttcaaggcat aagcgaatcg 420
 cacggttaacc caagaacgga 440

<210> 82
 <211> 446
 <212> DNA
 <213> Staphylococcus hominis

<220>
 <221> misc_feature
 <222> (2)..(2)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (5)..(6)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (428)..(428)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (441)..(441)

<223> n is a, c, g, or t

<220>

<221> misc_feature

<222> (444)..(444)

<223> n is a, c, g, or t

<400> 82

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cncncnccctt atgaggaagc ttcaataacc tgtttaacta aacgtaaaat tgctggatta 60
tatggttgat ataaatatga aacacgttca gacatacgat cagctgccat agtatattga 120
attaagtcac tagttcctat actaaagaaa tctacttctt tagcaaagat atcagctaac 180
gcagcagtag aaggaatctc taccatgata cctacttoga tatcatcagc aacttcttgt 240
ccttcgctag ttaatttata tttttcttct aaaagaatag ctttagcatc tctaaactct 300
ttaatagtag ctaccattgg gaacataata ttttaatttac cataagcaga tgcgcgtaat 360
aacgcacgta attgtgttct gaagatgtct tgttgatcta agcacaacg aattgcacga 420
taaccanga acgattcat ntenta 446
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<210> 83

<211> 445

<212> DNA

<213> Enterococcus faecium

<400> 83

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cgcggtgtgct gcatcaatta catttttgat caaacgtaaa attgatgggt tatatggttg 60
gtacaagtaa gaaacgcgtt cgttcatacg gtctgtgcc attgtgtatt gaatcaaatc 120
gttcgtacct acagagaaga aatctacttc ttttgcaaac ttgtctgcta agactgctgc 180
tgctggaatc tcgatcatga tgcgacttg gatcgtatca gatacttctt tgccttcact 240
gatcaatttt tgtttttctt cttcaaagat cgcttttgct gcgcggaatt ctttgagtgt 300
agctaccata gggaacatga tacgtaagtt accatgaaca gatgcacgaa gcaatgcacg 360
catttgtgta cggaacattt cgtcgccttg ttcagataaa ctgatacgca atgcacgata 420
tcccaagaac ggatcattct cctta 445
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<210> 84

<211> 445

<212> DNA

<213> Clostridium perfringens

<220>

<221> misc_feature

<222> (2)..(2)

<223> n is a, c, g, or t

<220>

<221> misc_feature

<222> (434)..(435)

<223> n is a, c, g, or t

<220>

<221> misc_feature

<222> (437)..(438)

<223> n is a, c, g, or t

<220>

<221> misc_feature

<222> (441)..(441)

<223> n is a, c, g, or t

<400> 84

cntgtttgtg agctccatct attgtcattt tgattaatct taatacagct ggatgcattg 60

gattgtaaag gtatgatacc ttttcaactca ttctgtcagc agctaatagta tattgtatta 120

aatcgtagt tcctattgag aagaaatcaa catgcttagc taattcatca gcataaactg 180

ctgcagctgg gatttcaacc atgatacccc attgaattga atctgagtat gctatacctt 240

ctgcttttaa ctcagctttg cattcttcaa caaatgcttt agcttggttg aattcttcta 300

atcctgaaat cattgggaac attactgcaa gatttccata aacagaagct cttataaag 360

ctcttatttg aactctaaag atatcttttc tgtctaagca taatcttata gctctgtatc 420

ccaagaacgg atcnntnntc nttaa 445

<210> 85

<211> 440

<212> DNA

<213> Bacillus myco?es

<220>

<221> misc_feature

<222> (431)..(431)

<223> n is a, c, g, or t

<220>

<221> misc_feature

<222> (437)..(437)

<223> n is a, c, g, or t

<400> 85

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gggtataagta agatacacgt tcgttcatac ggtctgcagc cattgtgtat tggattaagt 120

catttggtcc gatagagaag aaatcgactt cttttgcgaa ttgatctgct aatactgctg 180

aagctggaat ttcaaccatc ataccaactt caatagaatc agaaacagtt gtacccgctt	240
ggacaagtct ttctttctct tctaataaaa tcgctttcgc ttgacggaat tcatcaagag	300
ttgcaatcat cggaacata atttttaagt taccgtatac gctagcacga agtaatgcac	360
gaagttgtgt acggaacaca tcttgttctt caaggcataa gcgaattgca cggtatccca	420
agaacggatc nttctcntta	440

<210> 86
 <211> 451
 <212> DNA
 <213> Bacillus myco?es

<400> 86	
gccattttcc ttctttatga gcagcatcga taaccatttt tacaagacgt aaaatagatg	60
ggttatatgg ttggtataag taagctactt gttcgttcat acggtccgca gccattgtgt	120
attggattaa atcatttggt ccgatagaga agaaatcaac ttcttttgcg aattgatctg	180
ctaatactgc agaagctgga atttcaacca tcataccaac ttcaatagaa tcagaaacag	240
ttgtacccgc ttctacaagt ttgctttct cttctaataa gattgctttc gcttgacgga	300
actcatcaag agttgcaatc attgggaaca taatttttaa gttaccgtat acgctagcac	360
gaagtaatgc acgaagttgt gtacggaaca catcttgctc atcaagacat aagcgaattg	420
cacggtatcc caagaacgga tcattctctt a	451

<210> 87
 <211> 455
 <212> DNA
 <213> Streptococcus oralis

<220>
 <221> misc_feature
 <222> (2)..(3)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (434)..(434)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (446)..(446)
 <223> n is a, c, g, or t

<400> 87

cnntttccct tcgcgtgagc tgctttgata acgttggtga tcagcgtagg attgatgggt 60
 tgtatgggtg gtaaagggtat gaaacttgct cgttcatacg gtctgctgcc attgtgtatt 120
 ggatcaagtc gtttgtacca attgagaaga agtcaacttc tttagcaaat tgggtctgcaa 180
 gcattgctgc tgcaggaatt tcgatcatga taccaacttg gatattatcc gcaactgcaa 240
 caccttcagc aagaagggtt gctttttctt cgtcaaagac tgctttcgct gcacggaatt 300
 ctttcaagag cgcaaccatt gggaacatga tacgtaattg accgtgaaca gacgcacgaa 360
 gaagagcacg gatttgtgtg cggaacatag catctccagt ctcagagata gagatacgaa 420
 gagcacggaa tccnaagaac ggatcnnntt tctta 455

<210> 88
 <211> 456
 <212> DNA
 <213> Enterococcus hirae

<220>
 <221> misc_feature
 <222> (2)..(2)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (447)..(447)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (450)..(450)
 <223> n is a, c, g, or t

<400> 88
 cnatttacct tcgcatgcgc tgcacgatc acgtttttaa tcaaacgtag gattgatggg 60
 ttgtaagggt gatacaagta tgaaacacgt tcgttcatac ggtcagctgc catagtgtat 120
 tggatcaagt cattcggtcc tactgagaag aagtcaactt ccttagcaaa cttgtcagct 180
 aagacagctg ctgctggaat ttgatcatg atgccgactt ggatcgatc agatacttcc 240
 acgccttcat tcaataattt ttgtttttcg tcttcaaaga ttgcttttgc agcacggaat 300
 tctttaagag tcgtaccat tgggaacatg atacgtaagt ttccatgaac agatgcacgt 360
 aataatgcgc gcatttgcgt acggaacatt tcgtcacctt gttctgacaa gctgattcgt 420
 aatgcacgat agcccaagaa cggatcnnntn tctta 456

<210> 89

<211> 457
 <212> DNA
 <213> Enterococcus avium

<220>
 <221> misc_feature
 <222> (2)..(2)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (7)..(7)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (447)..(447)
 <223> n is a, c, g, or t

<400> 89
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 ttatatgggtt ggtaaaggta agaaacgcgt tcgttcatac ggtcagctgc catcgtgtat 120
 tgaattaagt catttggtcc gatactgaag aaatcaactt ctttggcaaa cttgtcagct 180
 agtacagctg cagctggaat ttgatcatg attccgactt ggatcgatc agaaacttcc 240
 acgccttctt taaccaattt ttctttttct tcgttgaaca ttttcttcgc tgcacggaat 300
 tcttttaatg tcgcaaccat tgggaacatg atgcgtaagt taccatgaac agaagcgcgc 360
 aacaatgcac gtaattgtgt acggaacatg tcatcgcta gttcggatag actaatacgc 420
 aatgcacgat aaccaagaa cggatccttt ttcttaa 457

<210> 90
 <211> 437
 <212> DNA
 <213> Staphylococcus saprophyticus

<400> 90
 tcgtaagaag cttctattac ttgttttact aaacgtaata ttgaaggatt atatggttga 60
 tacaagtaag aaacacgttc tgacattcta tcagcagcca ttgtatattg aattaaatca 120
 ttogttccta tactgaagaa atcaacttct ttagcaata catctgcaa cgcagcagta 180
 gaaggaattt ctaccataat accaagttcg atatcatcag aaacttcaat gccttcattt 240
 gttaagttat ctttttcttc aagtaacaat gctttagcat cacggaactc ttggattgta 300
 gctaccatag ggaacatgat attcaattta ccaaagcag atgcacgtaa taatgcacgc 360
 aactgtggtc tgaaaatata aggttgatct aggcataaac ggatagcacg gtaaccaag 420

aacggatcat tctctta

437

<210> 91
<211> 430
<212> DNA
<213> Staphylococcus haemolyticus

<220>
<221> misc_feature
<222> (419)..(419)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (422)..(422)
<223> n is a, c, g, or t

<400> 91
gaagcttcat gacttgttta accaagcgta aaatagctgg gttataaggt tggataaagt 60
atgaaacgcg ttctgacata cggtcagctg ccatagtata ttgaattaaa tcattagtag 120
caatactgaa gaaatccatt tcttttagcaa agatatcagc taaagcagct gtagatggaa 180
tctcaaccat gatacctaac tcaatttcat cagaaacgtc atgaccatca tttttaagat 240
tttctttttc ttctaacaga atggcttttag catcacggaa ttcatgatt gtagctacca 300
ttgggaacat aatgtttaat ttaccgtaag ctgacgcgcg taataatgca cgtaattgtg 360
ttctgaaaat atcttggtga tctaagcata gacgaattgc tctgtaaccc aagaacggnt 420
cnttctctta 430

<210> 92
<211> 444
<212> DNA
<213> Enterococcus flavescens

<220>
<221> misc_feature
<222> (1)..(1)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (438)..(439)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (442)..(442)

<223> n is a, c, g, or t

<400> 92
ngcatgcgct gagtcgatca cgtttttgat caaacgtaaa attgatgggt tgtatggttg 60
gtacaagtaa gacacgcgct cgttcatgcg gtctgcagcc attgtgtatt ggatcaagtc 120
attggtacca ataactgaaga agtcaacttc cttcgcaaac ttgtctgcta agacagcagc 180
tgctggaatt tcgatcatga ttccgacttg gatctcgta gaaacctcaa cgccttcgtc 240
aatcaatttt tgacgctctt cttcatacat tttcttcgca gtacggaact ctttcaatgt 300
tgccaccatt gggaacatga tacgtaagtt gccgtgagca gaagcacgta acaacgcacg 360
aagttgggta cggaacatgt catccccaag ttcagataag ctgatacgca atgcacgata 420
gcccaagaac ggatatttnt cnta 444

<210> 93
<211> 439
<212> DNA
<213> Enterococcus casseliflavus

<220>
<221> misc_feature
<222> (429)..(429)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (434)..(434)
<223> n is a, c, g, or t

<400> 93
gcgctgagtc gatacgtttt tgatcaaacg taaaattgat gggttgtatg gttggtacaa 60
gtaagacacg cgctcggttca tgcggtctgc agccatgggtg tattggatca agtcattggt 120
accaatactg aagaagtcaa cttccttcgc aaacttgtct gctaagacag cagctgctgg 180
aatttcgatc atgattccga cttggatctc gttagaaacc tcaacgcctt cgtcaatcaa 240
tttttgacgc tcttcttcat acattttctt cgcagtacgg aactctttca atgttgccac 300
cattgggaac atgatacgta agttgccgtg agcagaagca cgtaacaacg cacgaagttg 360
ggtagcgaac atgtcatccc caagttcaga taagctgata cgcaatgcac gatagcccaa 420
gaacggatna tttntctta 439

<210> 94
<211> 450
<212> DNA

<213> Enterococcus gallinarum

<220>

<221> misc_feature

<222> (6)..(6)

<223> n is a, c, g, or t

<220>

<221> misc_feature

<222> (443)..(443)

<223> n is a, c, g, or t

<220>

<221> misc_feature

<222> (447)..(447)

<223> n is a, c, g, or t

<400> 94

accttngcat gtgctgaatc gattacgttt ttgatcaacg tagaatagat gggttatatg 60

gttggttaaag atatgaaact tgttcattca tacgggtctgc agccattgtg tattggatca 120

agtcattggt accaatactg aagaagtcta cttccttggc aaatttgtca gctaagacag 180

ctgctgcagg aatttcgatc atgataccta cttgaatatc ttcagagacg gttacgcctt 240

catcgatcaa tttttgacgt tcttcttcgt acattttttt cgcagcacgg aactctttca 300

atgttgccac cattgggaac ataatccgca agtttccgtg agcagaagca cgtaacagcg 360

cacgaagttg tgtacggaac atgccgtcac ccaactcaga caaactgata cgcaatgcac 420

gatagcccaa gaacggatct ttntccttta 450

<210> 95

<211> 443

<212> DNA

<213> Enterococcus raffinosus

<220>

<221> misc_feature

<222> (1)..(1)

<223> n is a, c, g, or t

<220>

<221> misc_feature

<222> (432)..(433)

<223> n is a, c, g, or t

<220>

<221> misc_feature

<222> (438)..(438)

<223> n is a, c, g, or t

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<400> 95
ntgtgctgca tcaatgacgt ttttaatcaa acgtaagatt gatggggttat atggttgata      60
cagggtatgaa acgcgttcgt tcatacgggc agcagccatt gtgtattgaa tcaagtcggt      120
tgttccgata ctaaagaagt caacttcttt tgcaaacttg tcagctagaa cagctgcggc      180
agggatctcg atcatgattc cgacttgaat cgtatcagaa accttcacgc cttcgttaac      240
aagcttttct ttttcttcgt tgaacatttt cttcgctgca cggaactctt ttaatgttgc      300
aaccattggg aacatgatgc gtaaattgcc atgaactgaa gcgcgtaaca atgcacgtaa      360
ctgtgtacgg aacatatcgt cgcctaattc agataaactg atacgcaatg cacgataacc      420
caagaacgga tnnttctncc taa                                              443

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<210> 96
<211> 453
<212> DNA
<213> Enterococcus villorum

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<220>
<221> misc_feature
<222> (3)..(3)
<223> n is a, c, g, or t

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<220>
<221> misc_feature
<222> (14)..(14)
<223> n is a, c, g, or t

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<220>
<221> misc_feature
<222> (432)..(432)
<223> n is a, c, g, or t

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<220>
<221> misc_feature
<222> (434)..(434)
<223> n is a, c, g, or t

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<220>
<221> misc_feature
<222> (441)..(441)
<223> n is a, c, g, or t

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<220>
<221> misc_feature
<222> (451)..(451)
<223> n is a, c, g, or t

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<400> 96
ggnctctcgt cgtnagctgc atcaatcacg tttttgatta aacgtaaaat tgatgggtta      60

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taaggttggg ataagtatga aacgcgttcg ttcatacggg cagctgccat agtgtattga	120
atcaaatacat ttgttcttac tgagaagaag tcaacttctc tcgcaaactt gtcagctaaa	180
acagcagctg caggaatttc aatcataatg ccgacttgga tcgtatcaga tacttccacg	240
ccttcattca ataacttttg tttttcatct tcaaagattg cttttgcccc acggaattct	300
ttaagtgtcg ccaccattgg gaacatgata cgtaagttac cgtgaacgga tgcacgcaat	360
aacgcacgca tttgtgtacg gaacatttcg tctccttggt cagaaagact gatacgtaat	420
gcacgatatc cnangaacgg nttatttttc nta	453

<210> 97
 <211> 442
 <212> DNA
 <213> Clostridium difficile

<220>
 <221> misc_feature
 <222> (4)..(5)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (9)..(9)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (13)..(13)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (17)..(17)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (23)..(23)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (36)..(36)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (67)..(67)
 <223> n is a, c, g, or t

<220>

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<221> misc_feature
<222> (83)..(83)
<223> n is a, c, g, or t

<400> 97
tttnnggang gcntctntcg tangcattgt ctatancagt ctttataagt cttaaaacag      60
ctggatnaaa ttgattgtaa agntaactta tcttttgatt cattctatca actgcacaag      120
tgtattgaat taaatcatta gttcctatag agaagaaatc tacgtgttta gccaatatcat      180
cagatatcac agcagcagat ggaacttcta tcatcataacc aatttctaca tcttttagcat      240
aagccacacc ttcagaatca agttctgcta aaacttcttt tacaacttct ttagcttgta      300
acaactcttc taaagatgaa atcattggga acatgattct taatcttcca tgaacactag      360
ctctatataa agctctcaat tgagtcttaa atatatcttt tctatctagg caaagtctta      420
ttgctctgta acccaagaac gg                                              442

```

```

<210> 98
<211> 444
<212> DNA
<213> Streptococcus mitis

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<220>
<221> misc_feature
<222> (1)..(1)
<223> n is a, c, g, or t

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<220>
<221> misc_feature
<222> (424)..(424)
<223> n is a, c, g, or t

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<220>
<221> misc_feature
<222> (442)..(442)
<223> n is a, c, g, or t

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<400> 98
ngcgtgagct gccttgataa cgttgttgat caagcgaagg attgatgggt tatatggttg      60
gtaaagggtat gaaacttgct cggtcatacg gtctgctgcc attgagtatt ggatcaagtc      120
gtttgttcca attgacatga agtctacttc ttttgcaaat tgggtctgcaa gcatcgctgc      180
tgcagggatt tcaatcatga taccaacttg gatatcatcc gcaactgcaa caccttcagc      240
aagaaggttt gccttttctt cttcataaac tgctttggct gcacggaatt ctttcaaaag      300
agcaaccatt gggaacatga tacgcaattg accatgaaca gaagcacgaa gaagagcacg      360
gatttggtgta cggaacattg catctccagt ttcagaaata gagatacgaa gggcacggaa      420

```

tccnaagaac ggatattttt cnta

444

<210> 99
<211> 446
<212> DNA
<213> Bacillus halodurans

<220>
<221> misc_feature
<222> (1)..(1)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (424)..(424)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (435)..(436)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (439)..(439)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (443)..(443)
<223> n is a, c, g, or t

<400> .99
nccttcgcta tgagctgctt taataaccat atcgacgagg cgtaaaatcg cagggtggtta 60
tggctgatac aggtaggaga ctgctcatt catgcgggtca gcagccatcg tatattgaat 120
taagtcgttc gttccgatac tgaaaaagtc tacttctttt gcaaaaagat tagccgctac 180
cgccgctgat gggatttcta ccatgattcc cacttcaatt gaatcggata cgtccactcc 240
ttcactaaga agcttgtctt tttcctcttg catgatcgct tttgcttggc gaagctcttc 300
aaggggtggcg atcattggaa acatcacctt taagttaccg tatgtgcttg cgccaagcaa 360
ggcacggagt tgggtccgga aaatatcttg tttttcaagg cacagacgaa tcgcccggaa 420
accnaagaac ggatnnttnt tcntaa 446

<210> 100
<211> 436
<212> DNA
<213> Bacillus weihenstephanensis

<220>
 <221> misc_feature
 <222> (1)..(1)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (427)..(427)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (433)..(433)
 <223> n is a, c, g, or t

<400> 100
 ntgagcagca tcgataacca tttttacaag acgtaaaata gatggggttat atgggttgga 60
 taagtaagct acttggttcgt tcatacgggc tgcagccatt gtgtattgga ttaagtcatt 120
 tgttccaata gagaagaaat caacttcttt tgcgaactga tcagctaata ctgctgaagc 180
 tggaatttca accatcatac caacttcaat agaatcagaa acagttgtac ccgctttaac 240
 aagtctttct ttctcttcta ataagattgc tttcgcttga cggaactcat caagagttgc 300
 aatcattggg aacataattt ttaagttacc gtatacgcta gcacgaagta atgcacgaag 360
 ttgtgtacgg aacacatctt gctcatcaag acataagcga attgcacggt atcccaagaa 420
 cggatcnttc tcntta 436

<210> 101
 <211> 458
 <212> DNA
 <213> Streptococcus species

<220>
 <221> misc_feature
 <222> (2)..(3)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (5)..(5)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (8)..(8)
 <223> n is a, c, g, or t

<220>

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<221> misc_feature
<222> (435)..(435)
<223> n is a, c, g, or t

<400> 101
cnnanttncc ttgcggtgag ctgctttgat aacgttggtta atcaacgaag gattgatggg      60
ttgtatgggtt ggtaaaggta tgaaacttgt tcgttcatac ggtcagcagc cattgtgtat      120
tggataaggt cgtttgttcc gattgagaag aagtcaactt ctttcgcaaa ttggtcagca      180
agcatagctg cagctgggat ttcaatcatg ataccaactt ggatatcatc tgaaacggca      240
acaccttcag ctttaagggt tgctttttct tcatcaaaga ttgctttagc agcacggaat      300
tctttaagaa gagcaaccat tgggaacatg atacgaagtt gtccgtgtac agatgcacga      360
agaagtgcac ggatttgtgt acggaacatt gcatttcctg tttctgagat agaaatacga      420
agtgcacgga atccnaagaa cggatccttt ttccttaa                                458

```

```

<210> 102
<211> 446
<212> DNA
<213> Streptococcus gordonii

```

```

<220>
<221> misc_feature
<222> (1)..(1)
<223> n is a, c, g, or t

```

```

<220>
<221> misc_feature
<222> (431)..(431)
<223> n is a, c, g, or t

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```

<220>
<221> misc_feature
<222> (442)..(442)
<223> n is a, c, g, or t

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```

<400> 102
ntgccttcgc atgagccgcc ttgataacat tgttgatcaa gcgaaggata gatggggttat      60
aaggttgata gaggtaagag acttgttcat tcatccggtc agctgccata gtgtactgga      120
tcaagtcggt ggtaccaatt gagaagaagt caacttcctt ggcaaattga tccgccaaca      180
tagctgctgc tggaatttca atcatgatac ccacttgaat gttatccgct acagcaacac      240
cttcagcttg caatttcgct ttttcttctt cgtaaactgc tttagcctta cggaattctg      300
ttagaagggc taccattggg aacatgatac gtaattgtcc atgtacagac gcacgtaaga      360
gagcgcggat ttgtgtacgg aacatagcat taccagtttc agagatagag atacgcaaag      420

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cacggaagcc naagaacggt cntttt

446

<210> 103
<211> 446
<212> DNA
<213> Streptococcus canis

<220>
<221> misc_feature
<222> (2)..(2)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (424)..(424)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (435)..(435)
<223> n is a, c, g, or t

<400> 103
cncgtgagct gctttgataa cgttgttaat caaacgaagg attgatgggt tgtatggttg 60
gtaaaggat gaaacttggt cgttcatatc gtcagcagcc attgtgtatt ggataaggtc 120
gtttgttccg attgagaaga agtcaacttc ttctgcaaatt tggtcagcaa gcatagctgc 180
agctgggatt tcaatcatga taccaacttc gatatcatct gaaacggcaa caccttcagc 240
tttaaggttt gctttttctt catcaaagat tgcttttagca gcacggaatt cttaagaag 300
agcaaccatt gggaacatga tacgaagttg tccgtgtaca gatgcacgaa gaagtgcacg 360
gatttggtga cggaacattg catttctgt ttctgagata gaaatacgaa gtgcacggaa 420
tcnaagaac ggtcnttttt ctctaa 446

<210> 104
<211> 437
<212> DNA
<213> Bacillus pumilus

<220>
<221> misc_feature
<222> (2)..(2)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (415)..(415)

<223> n is a, c, g, or t

<220>

<221> misc_feature

<222> (426)..(426)

<223> n is a, c, g, or t

<220>

<221> misc_feature

<222> (433)..(433)

<223> n is a, c, g, or t

<400> 104

cntacgctgc ttcataacaa gcgtaatcaa acgtaaaatc gctggattgt aaggctggta 60

aagataagac actcgttcgt tcattcgatc agcagccatt gtgtattgaa tcaaatcatt 120

tgttccaata ctgaagaaat caacttcttt tgcgaattgg tctgcgatga cagcggttga 180

tggaatttct accattatac cgatttcaat ggaatcggat acgtctgtac cagcggcaac 240

caatgcttct ttttcttcaa gtaaaatggc ttttgcttct ctaaattctg ataatgtcgc 300

gatcataggg aacatgattt tcaagtttcc atatgtactt gcacgaagta aggcgcgtag 360

ttgtgttctg aaaatctcct gttcttcgag gcaaaggcgg atcgctctaa agccnaagaa 420

cggatntttt tcnttaa 437

<210> 105

<211> 437

<212> DNA

<213> Bacillus species

<220>

<221> misc_feature

<222> (426)..(426)

<223> n is a, c, g, or t

<220>

<221> misc_feature

<222> (429)..(429)

<223> n is a, c, g, or t

<220>

<221> misc_feature

<222> (431)..(431)

<223> n is a, c, g, or t

<400> 105

tgagcgcacg gataaccatt tttacaagac gtaaaataga tgggttatat gggttggtata 60

agtatgatac ttgttcgttc atacgggtctg cagccattgt gtattggatt aaatcatttg 120

ttccgataga gaagaagtca acttctttcg cgaattgatc tgctaatact gctgaagctg 180

ggatttcaac catcatacca acttcaatag aatcagaaac agttgtaccc gcttctacaa	240
gtttcgcttt ctcttctaataaaaattgctt ttgcttgacg gaactcatca agagttgcaa	300
tcattgggaa cataatTTTT aagttaccgt atacgctagc acgaagtaat gcacgaagtt	360
gtgtacggaa cacatcttgc tcatcaagac ataagcgaat tgcacggtat cccaagaacg	420
gatccnttnt nctttaa	437

<210> 106
 <211> 443
 <212> DNA
 <213> Lactococcus lactis

<220>
 <221> misc_feature
 <222> (16)..(16)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (422)..(422)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (430)..(431)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (437)..(437)
 <223> n is a, c, g, or t

<400> 106	
gtgagctgct ttgatncatt gttaatcaaa cgaaggattg atggattgta aggttggtaa	60
aggtaagaaa cttgttcatt catacgtct gcagccattg tatattggat gaggtcggtt	120
gtaccaattg agaagaaatc aacttcctta gcaaattggt ctgcaagcat tgctgctgct	180
ggaatttcaa tcatgatacc tacttcgata ccatctgcaa ctggaacacc ttcagcaatc	240
aattttgctt tttcttcgtc ataaatcttc ttagctgcac ggaactcagt tacgagagca	300
accattggga acatgatacg aagttgtccg tgtacagaag cagcaagag tgcacgcaat	360
tgtgtacgga acattccgtc accagctggt gaaaggctga tacgaagtgc acgccatccc	420
angaacggtg nttttntttt taa	443

<210> 107

<211> 454
 <212> DNA
 <213> Bacillus firmus

<220>
 <221> misc_feature
 <222> (8)..(8)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (16)..(16)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (19)..(19)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (22)..(22)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (449)..(449)
 <223> n is a, c, g, or t

<400> 107
 tccaggangg gttctntcnt angtgcgctc aattaccatt ttaactaaac gcaggattgc 60
 aggattatac ggctggtaaa ggtaagaaac acgctcattc atgcgggtctg cagccattgt 120
 gtactgaatt agatcattag tgccaacact gaagaaatcg acttcttttag caaactgac 180
 agccataaca gcagttgaag gaatttcaac cataattcca atttcaatgt tgtcggcaac 240
 ctctgctcct tcgctcaciaa gcttttggtt ttcttcttca aggattgctt tgccctgacg 300
 gaattcttca agagtggcaa tcataggga catgatttta aggtttccat aggtgcttgc 360
 tcttaataaa gcccttaatt gcgtcctgaa catatcctgt tcttccagac acagacgaat 420
 cgcccgaag cccaagaacg gattcattnt cttta 454

<210> 108
 <211> 434
 <212> DNA
 <213> Haemophilus influenzae

<220>
 <221> misc_feature
 <222> (425)..(426)

<223> n is a, c, g, or t

<400> 108

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tgagaggcat caatcacttg ttttaattaaa ccaagcacag aggggtgcat cggattataa    60
agatgggaaa taaactcatt accgcgatct acagccaaag tatattgagt taaatcgтта    120
gtaccgatac taaagaaatc cacttctttt gctaaaaatt ttgcatttac tgcggcagag    180
gggggtttcga ccattacacc aacttggata ttattatcaa acagtctccc ctcttcacgt    240
aattccgctt ttaatgtttc aataaccgct ttttaattccc gaatttcttc tacagaaata    300
atcatcgga acattaccgc caatttacca aaagctgaag cacgtaacac cgcgcgtaat    360
tgtgcattta aaatttcacg acgatcta at gcaatgcgaa tcgcacgcca tccaagaac    420
ggatnntttt tctt                                                    434
```

<210> 109

<211> 442

<212> DNA

<213> Streptococcus bovis

<220>

<221> misc_feature

<222> (420)..(420)

<223> n is a, c, g, or t

<220>

<221> misc_feature

<222> (432)..(432)

<223> n is a, c, g, or t

<220>

<221> misc_feature

<222> (438)..(438)

<223> n is a, c, g, or t

<400> 109

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tgagctgctt tgataacggt gttaatcaaa cgaaggattg atgggttata tggttggttaa    60
aggatatgaaa cttgttcatt catacggtca gcagccattg tgtattggat aaggtcgttt    120
gttccgattg agaagaagtc aacttctttt gcaaattggt cagcaagcat agctgcagct    180
gggatttcaa tcatgatacc aacttggata tcatctgaaa cggcaacacc ttcagcttta    240
aggttagctt tttcttcac aaagattgct ttagcagcac ggaattcttt aagaagtgc    300
accattggga acatgatacg aagttgtccg tgtacagatg cacgaagaag tgcacggatt    360
tgtgtacgga acattgcatt tcctgtttct gagatagaaa tacgaagtgc acggaatccn    420
aagaacgggc cntttttnct ta                                                    442
```

<210> 110
 <211> 443
 <212> DNA
 <213> Enterococcus durans

<220>
 <221> misc_feature
 <222> (431)..(432)
 <223> n is a, c, g, or t

<400> 110
 tgtgctgcat caatcacgtt tttgatcaaa cgtaaaattg aagggttata aggttgatac 60
 aagtaagata cacgttcggt catgcggtca gctgccattg tgtattgaat caagtcattc 120
 gtacctactg agaagaagtc aacttccttc gcaaacttat ctgctaagac agctgctgca 180
 gggatttcaa tcatgatgcc gacttggatc gtatcagata cttccacgcc ttcgctcact 240
 aatttttgtt tttcttcttc aaagattgct ttcgctgcac ggaattcttt aagagtcgct 300
 accattggga acatgatgcg taagtttcca tgaacagatg cacgtaacaa tgcgcgcatt 360
 tgtgtacgga acatttcgtc acctaatcca gacaagctga tacgtagcgc acgatagccc 420
 aagaacggat nnttttccct taa 443

<210> 111
 <211> 450
 <212> DNA
 <213> Streptococcus sanguis

<220>
 <221> misc_feature
 <222> (434)..(435)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (441)..(441)
 <223> n is a, c, g, or t

<400> 111
 cgcatgagct gccttgataa cattgttaat caagcgaagg atagatggat tgtaagggtg 60
 atagaggtaa gagacttgct cattcatccg gtcagccgcc atagtgtact gaatcaagtc 120
 gttagtacca attgagaaga agtctacttc cttggcaa atgatccgcca acatagctgc 180
 tgctgggatt tcaatcatga taccacttg gatattatct gctactgcaa cgccttcagc 240
 ttgcagctta gctttttctt cgtcataaac cgcttttagct ttgcggaatt ctgtcagaag 300

ggccaccatt gggaacatga tacgcaattg tccatgtaca gaagcacgca agagagcgcg 360
gatttgtgta cggaacatag catcgccagt ttcagagata gagatacgca aagcacggaa 420
accaaagaac ggtntttttt ntctttaaaa 450

<210> 112
<211> 453
<212> DNA
<213> Enterobacter cloaceae

<220>
<221> misc_feature
<222> (440)..(441)
<223> n is a, c, g, or t

<400> 112
tcctttacct tctgcatgag agcatcaata acttgcttga tcaagttcag tacggacggt 60
gacattggct ggtagagatg tgaaatcata tcattaccac ggtcaactgc caggggtgtac 120
tgcgttaa at cattggtgcc gatactaaag aaatcaactt ctttggctaa atgacgcgca 180
atggtcgcgg ctgctggtgt ttccaccatt acgccgatct caattgactc gtcaa atgct 240
ttaccttcgt cacgcaattc ctgtttgtag atctcgatct ctttcttcag tgcacgcact 300
tcttcaacag agatgatcat cggaacata atgcgagct taccgaaagc agaggcacgc 360
agaatgcac gcacctggc acgcaggatt tctttacgat ccatggcgat acgcactgca 420
cgccagccca agaacggatn nttttttctt taa 453

<210> 113
<211> 449
<212> DNA
<213> Serratia liquefaciens

<220>
<221> misc_feature
<222> (1)..(1)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (4)..(4)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (17)..(17)
<223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (427)..(427)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (435)..(435)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (438)..(438)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (445)..(445)
 <223> n is a, c, g, or t

<400> 113
 ntgncttctg catgagnatg catcaataac ctgtttgatc aggccaagca ctgatgggga 60
 catcgggtta tagagatgag aaatcagctc attgccgcga tctaccgcca gagtatactg 120
 ggtagatcg tttgtcccaa tactaaagaa gtcgacttct ttgccaggt gatgagcaat 180
 cactgccgcg gccggtgttt ccaccattac gccacttca atggtctcgt caaaggcctt 240
 ggattcttca cgcagctgcg ccttcagcgt ctcgatttca cctttcagat cgcggacttc 300
 ttccacggaa atgatcatcg ggaacatgat gcgcagtttg ccgaacgcgg aagcgcgcag 360
 gatggcgcgc agttgcgcgt gcaggatttc tctgcggtcc atggcgatac gaatcgcgcg 420
 ccagccnaag aacgnttntt ttanttta 449

<210> 114
 <211> 436
 <212> DNA
 <213> Proteus mirabis

<220>
 <221> misc_feature
 <222> (427)..(427)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (431)..(431)
 <223> n is a, c, g, or t

<400> 114
 gtgtgatgca tcaatcacct gtttaatcag attaagtaca gcaggtgaca ttggattata 60

tagatgagat atcagctcat ttccacggtc tacagccaga gtatattgtg ttagatcggt	120
agtcccaata ctgaaaaagt caacttcttt tgccatatgg cgagccataa cagccgctgc	180
tggcgtttca accataacac cgacttcgat agattcatca aaaggcttat tttcttcacg	240
aagctggctt ttcagtatct caagttccgc tttcaatgct cggatctctt caacagagat	300
aatcattgga aacataatac gtagtttacc aaaagcagac gctcttaaga tagcacgtaa	360
ttgtggatga aggatctctt tgcggtaag acaaatacga attgcacgcc aacccaagaa	420
cggatccttt ntcctt	436

<210> 115
 <211> 431
 <212> DNA
 <213> Providencia stuartii

<400> 115	
gcctctgcat gtgatgcac aatgacttgc ttaatcagtt caatacagca ggcgacattg	60
gattgtagag gtgagaaatc agctcattac cacggtaac agctagagta tattgagtga	120
gatcgttcgt cccaatactg aaaaagtcaa cttcttttgc taaatgatga gcaataaccg	180
ctgcggcagg ggtttccacc atgacaccaa cttcgattga ttcacaaag gctttgcctt	240
cttcacgtaa ttgacctttt agcatctcaa gttctgcttt tagttcgca acttcctcaa	300
cggaaataat catcggaac ataatacga gtttaccaaa acttgaggct cttaaaatag	360
ctcttaactg agaatgtaga atttctttgc gatcaaggca aatacgaatt gcccgccagc	420
ccaagaacgg t	431

<210> 116
 <211> 446
 <212> DNA
 <213> Proteus vulgaris

<220>
 <221> misc_feature
 <222> (434)..(435)
 <223> n is a, c, g, or t

<400> 116	
ccttctgcat gtgatgcac aataacctgt tttatcaggt taagtactgc tggtgacatt	60
ggattataca gatgagatat cagctcattt ccacggctca cagccagagt atattgtgtt	120
agatcgtagg tccaatact gaaaaagtca acttcttttg ccatgagacg tgccattacg	180

gcccgcgcag gggtttcaac catgacaccg acttcgatag actcatcgaa agttttgttt 240
tctgcacgaa gctggctttt cagtatttca agttctgctt tcaatgcgcg aatctcttca 300
atagagataa tcattggaaa cataatgcgt agtttaccaa aagcagatgc tcttaagata 360
gcacgtaatt gcgaatgaag gatctcttta cggtaagac aaatacgaat tgctctccaa 420
cccaagaacg gtcnnttttt ttctta 446

<210> 117
<211> 458
<212> DNA
<213> *Staphylococcus simulans*

<400> 117
ttctccgcac atacctgtcc atttaccttc agcatgagac gcttcgataa cacgttgtac 60
caagcgtaaa atagctgggt tatatgggtg gtataaataa gacacacgtt ctgacatacg 120
gtcagctgcc attgtatatt ggattaagtc atttgttccg atactgaaga agtctacttc 180
tttcgcaaag acatcagcaa gtgctgctgt cgatggaatt tcaaccatga taccgacttc 240
gatatcatct gaaacttcaa caccttcatt ttttaaggttt tgacgttctt cttctaataa 300
tgctttcgca tcacggaatt cttgaattgt cgcaaccatt gggaacataa tgtttaattt 360
tccgtatact gaagcacgta ataacgcgcg taattgcgga cggaaaattt ctggttgtgc 420
taagcacaag cggattgcac gataacccaa gaacggat 458

<210> 118
<211> 454
<212> DNA
<213> *Staphylococcus sciuri*

<400> 118
ctccgcacat accagtccat ttaccttctt tatgagaagc ttcaattact tgcttaacta 60
agcgaagaat tgcagggtta tatgggttgg ataagtaaga aacacgctca gacatacggc 120
cagcagccat tgtatattgg attaaatcat tcgtaccaat actgaagaaa tcaacttctt 180
tagcaaagat gtctgcaagt gctgcagtag atggaatttc taccataata ccgatttcga 240
tatcatccgc aacgttaaca ccttcagaaa ctaatttttc tttttcctca agtaagattg 300
cttttagcatc tctaaattct ttaatagttg caatcatagg gaacatgata ttttaacttac 360
caaattcaga tgcgcgtaat aaagctctta attgtgttct aaagatttca gtttgatcta 420
aacataaacg aatcgctcta tatcccaaga acgg 454

<210> 119
 <211> 454
 <212> DNA
 <213> *Staphylococcus capitis capitis*

 <400> 119
 tccgcacata ccagtcatt taccttcttt atgagaagct tcaatgactt gcttaacaag 60
 acgtaatata gatgggttat atggttgata taaataagat acacgctctg acatacgatc 120
 agcagctagt gtatattgaa ttaaattcatt tgtaccaata ctaaagaaat ctacttcctt 180
 cgcaaagaca tctgctaatag cagcagttgc tgggaatttca accatgatac ctaattcaat 240
 atcatcagaa atgtcataac cttcattttc aagggttttc ttttcctcta aaagaattgc 300
 tttggcatca cggaattcctt taatagtagc aaccattggg aacatgatat ttaatttacc 360
 gtaagcagat gcacgtaata atgcacgtaa ttgcggtcta aaaatatcctt gttgagctaa 420
 acataaacga attgctctat aaccaagaa cgga 454

<210> 120
 <211> 464
 <212> DNA
 <213> *Staphylococcus warneri*

 <400> 120
 ccgcacatac cagtcattt accttctttg tgagaagctt caatgacttg ttttactaag 60
 cgtaaaattg aagggttgta tggttgatat aagtaagata cacgttcaga catacgggtca 120
 gctgctaata tgtattggat taagtcattt gtaccaatac taaagaaatc tacttcttta 180
 gcaaatacat cagctaatagc tgctgtcgct ggtatttcaa ccatgatacc taactcaata 240
 tcttcagaaa cttcataacc ttcattttga agattttcctt tttcttctaa taacattgct 300
 ttagcatcac ggaattcctt gatagttgct accattggga acatgatatt taatttacca 360
 taaactgatg cacgtaataa cgcgcgtaat tgtggtctga aaatatcagg ttgagctaag 420
 caaagacgaa tcgctctgta tccaagaac ggatcattct cttta 464

<210> 121
 <211> 454
 <212> DNA
 <213> *Staphylococcus cohnii urealyticus*

<220>
 <221> misc_feature
 <222> (453)..(453)
 <223> n is a, c, g, or t

<400> 121
 ccgcacattc cagtcatttt gccttcttta tgagaagcat caatcacttg ttgcactaaa 60
 cgtaaaattg ctggattgta tggttgatac aagtaagata ctgctctga catacgatcc 120
 ggggccattg tatattgaat taaatcggtc gttccgatgc tgaagaaatc tacttcttta 180
 gcaaaaacat ctgctaagtc tgcagttgaa ggaatttcta ccatgatacc aacttctata 240
 tcatacagata cttcaatacc ttcatattgtt aaattttctt tttcctctaa taacaatgct 300
 ttgcacacac ggaattcttt aattgtcgct accattggga acataatatt taaattccca 360
 taagctgacg cacgtaataa agcacgcaat tgcggtctga aaatgtcagg ttgatctaaa 420
 cataaacgaa tcgcacggta tccaagaac ggnt 454

<210> 122
 <211> 443
 <212> DNA
 <213> *Staphylococcus schleiferi* *scheiferi*

<400> 122
 ccgcacatac ctgtccattt accttcttta tgagatgctt caattacttg cttactaag 60
 cgtaaaattg aaggattgta aggttggtta agatatgata cacgttctga catacgggtca 120
 gctgccatcg tatattgaat taagtcattc gttccaatac taaagaagtc aacttcttta 180
 gcaaaaacat cagctaaagc tgctgtagat ggaatttcca ccataatacc taactcaata 240
 tcatacgttaa cttcaacgcc ttcttgTTTT aagttttctt tttcttcaag aagaagcgct 300
 tttgcacgcg ggaattcttt aatcgctgca accattggga acataatggt cagttttccg 360
 taagttgaag cgcgtaataa cgctcttaat tgtggacgga aaatttcagg ttgatctaaa 420
 caaagacgaa ttgcacggta tcc 443

<210> 123
 <211> 459
 <212> DNA
 <213> *Staphylococcus intermedius*

<220>
 <221> misc_feature
 <222> (67)..(67)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (234)..(234)
 <223> n is a, c, g, or t

<400> 123
 ccgcacatac ctgtccattt gccctcttgg tgagaagcgt caatcacttg ttttaattaaa 60
 cgtaagnatt gatggattat atggttggta aagataagat acacgttctg acatacggtc 120
 tgcagccatt gtgtattgaa ttaaatacgtt tgtaccgata ctgaagaaat ccacttcttt 180
 cgcaaataca tctgcaagtg cggctgttgc agggatttca accatgatac ctanttcgat 240
 atcgctgctc acttctacgc cttcttgttt caagttttcc ttttcttcaa gaagtaacgc 300
 tttcgcatca cggaattctt gaatcggttgc caccattggg aacataatat tcaatttacc 360
 gtatgctgaa gctcttaata atgcacgtaa ttgtggacgg aaaatttcag gttgatctaa 420
 acataaacga atgcacgggt aaccaagaa cggattcat 459

<210> 124
 <211> 458
 <212> DNA
 <213> *Staphylococcus cohnii cohnii*

<220>
 <221> misc_feature
 <222> (446)..(446)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (453)..(453)
 <223> n is a, c, g, or t

<400> 124
 ccgcacatcc ctgtccattt accttcttta tgactggcat caataacttg tttcatcagt 60
 ctaagaatcg ctgggttata aggctggtaa agataagaga cgcgttcact catacgggtct 120
 gcagccatcg tatattgaat aagatcattc gtaccgatac taaagaaatc aacctctttc 180
 gcaaagatat cggccattgc tgctgtagaa ggaatctcta ccatgatgcc aagctcgata 240
 tcgtcagcaa ctttaacttt atctgcaatt aaattggctt tctcttcttc taagattgct 300
 ttcgcatcac ggaattcggt gatagtcgca atcatcggga acatgatgct cagtttaccg 360
 tggatggatg cacgtaataa cgcacgaagc tgtgttctaa agatatcctg ctgatccaga 420
 caaagtcgaa tcgcacggta tccaangaac ggnttcat 458

<210> 125
 <211> 464
 <212> DNA
 <213> *Staphylococcus capitis uralyticus*

<220>
 <221> misc_feature
 <222> (453)..(453)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (459)..(459)
 <223> n is a, c, g, or t

<400> 125
 ccgcacatac cagtccattt accttcttta tgagaagcct ctattacttg cttaacaaga 60
 cgtaaaatag aaggattata tggttgatat aaataagata cacgttctga catacgatca 120
 gcagctagtg tgtattgaat taagtcatta gtaccgatac taaagaagtc tacttccttc 180
 gcaaagacat ctgctaatgc agcagttgct ggaatttcaa ccatgatacc taattcgata 240
 tcgtcagaaa tgtcataacc ttcatTTTTca aggtttttct tttcttctaa aagaatcgct 300
 ttagcatcac ggaattcttt gatagtagca accattggga acatgatatt taatttaccg 360
 taagcagatg cacgtaataa tgcacgtaat tgcggtctga aaatatcttg ttgcgctaaa 420
 cataaacgaa ttgctctata acccaagaac ggnttcatnt ctta 464

<210> 126
 <211> 440
 <212> DNA
 <213> Staphylococcus gallinarum

<220>
 <221> misc_feature
 <222> (435)..(435)
 <223> n is a, c, g, or t

<400> 126
 ccgcacatac ctgtccattt accttgttta actaaacgta aaattgaagg attatatggt 60
 tgatacaagt atgatacacg ttctgacatt ctatctgcag ccatagtgtg ttgaattaaa 120
 tcatttgtac cgatactaaa gaagtcaacc tcttttagcaa atacatcagc taaagctgct 180
 gtagaaggaa tttctaccat gataccta atcgatatcat cagatacttc aacaccttct 240
 tgtgttaaat tgtccttctc ttcaagaagt aatgcttttg catcacggaa ctcttgaatt 300
 gtagcaacca ttgggaacat gatatttaac ttaccgaatg cagatgcgcg taataatgca 360
 cgcaattgcg gtctgaaaat atcaggttga tccaagcata aacgtatcgc acgatatccc 420
 aagaacggat tcatntctta 440

<210> 127
 <211> 462
 <212> DNA
 <213> *Staphylococcus auricularis*

<400> 127
 ccgcacatgc cagtccatth accttcttta tgagaagctt cgatgacttg tttgctcaac 60
 caagcgtaaa atagctggat tatatgggtg ataaagggtat gatacgcgtt ctgacatgcg 120
 gtctgcagcc attgtatatatt gaattaagtc gtttgtaccg atactaaaga agtcgacttc 180
 tttcgcaaag acatctgcta aagcagctgt tgatggaatt tcgaccataa tacctaattc 240
 aatatcatct gagacttcaa ctccctcttg ttctaagttt gctttttctt cttccaacaa 300
 tgcttttagca tcacggaatt cttgaattgt cgcaaccatt gggaacatga tattgagttt 360
 tccgtacgta gatgcacgta ataatgcacg taattgtgga cggaaaatat caggttgatc 420
 taagcataaa cgaatcgcac gataacccaa gaacggattc at 462

<210> 128
 <211> 457
 <212> DNA
 <213> *Staphylococcus caseolyticus*

<400> 128
 ccgcacatcc ctgtccatth accttcttta tgactggcat caataacttg tttgatcagt 60
 ctaagaatcg ctgggttata gggctggtaa agataagaga cgcgttcact catacgggtc 120
 gcagccatcg tatattgaat aagatcattc gtaccgatac taaagaaatc aacctctttc 180
 gcaaagatat cggccattgc tgctgtagaa ggaatctcta ccatgatgcc aagctcgata 240
 tcgtcagcaa ctttaacttt atctgcaatt aaattggctt tctcttcttc taagattgct 300
 ttgcgcatcac ggaattcggt gatagtcgca atcattggga acatgatgct cagtttaccg 360
 tggatggatg cagtaataa cgcacgaagc tgtgttctaa agatatcctg ctgatccaga 420
 caaagtcgaa tcgcacggta tccaaagaac ggattca 457

<210> 129
 <211> 436
 <212> DNA
 <213> *Staphylococcus xylosus*

<400> 129
 tgtgaagctt taatcacttg ttttactaaa cgtaaaattg aaggattgta tggttgatac 60
 aagtaagaaa cagctcaga catacgcata gcagccattg tatattgaat caaatcattt 120

gtaccaatac taaagaaatc aacttcttta gcaaatacat ctgctaaagc agcagttgat 180
 ggtatctcta ccataatacc taattcaata tcgtcagata cttcaatgcc ttcgtttggt 240
 aaattctctt tttcttccaa taataatgct tttgcatctc gaaactcttt aattgtggca 300
 accattggga acatgatatt taatttaccg taagtagacg cacgtaacaa tgctcttaat 360
 tgtggtctga aaatatcagg ttgatctaag cataaacgaa ttgcacgata tcccaagaac 420
 ggatcatttt tcgtaa 436

<210> 130
 <211> 454
 <212> DNA
 <213> *Klebsiella pneumoniae*

<220>
 <221> misc_feature
 <222> (444)..(444)
 <223> n is a, c, g, or t

<400> 130
 ccgcacatgc cagtccattt accttcagcg tgagaagcat caataacttg cttaatcaga 60
 ttcagtacag acggtgacat cggctggtaa agatgtgaaa tcatatcatt accacgggtca 120
 actgccagag tatattgcgt taaatcattg gtgcgatac taaagaaatc aacttctttg 180
 gccagatgac gagcaatagt cgccgcagcc ggtgtttcca ccatcacgcc gatctcaatg 240
 gattcgtcaa atgctttacc ttcgtcacgc agttcctggt tgtagatttc gatctctttc 300
 ttcagcgcac gcacttcttc aacagagatg atcatcgga acataatgcg cagcttaccg 360
 aaagcggagg cgcgaggat ggcgcgaacc tggtcgcgca ggatctcttt acgatccatc 420
 gcaatagca cggcacgcca gccnaagaac ggat 454

<210> 131
 <211> 454
 <212> DNA
 <213> *Salmonella typhimurium*

<220>
 <221> misc_feature
 <222> (444)..(444)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (446)..(446)
 <223> n is a, c, g, or t

<400> 131
 ccgcacatgc cagtccattt accttctgca tgagaagcat caataacttg cttgatcaag 60
 ttcagtacgg acggtgacat tggctggtaa aggtgtgaaa tcatatcatt accacggtca 120
 actgccaggg tgtactgCGT taaatcattg gtgccgatac taaagaaatc aacttctttg 180
 gctaaatgac gCGcaattgt cgcCGcagcc ggtgtttcca ccatcacgcc aatctcaatg 240
 ctttcgtcaa atgctttacc ttcgtcacgc agttcctggt tgtagatttc aatctctttg 300
 cgcagcgcgc gaacttcttc aacagagatg atcatcgga acataatgcg caatttaccg 360
 aaagcgagg cagcgagaat cgcgcgaacc tggtcacgca ggatctcttt gcgatccatg 420
 gcgatacgca cggcgcgcca gccnangaac ggat 454

<210> 132
 <211> 476
 <212> DNA
 <213> Escherichia coli

<400> 132
 cctgccattt caccgcacat gccagtcatt ttgccttcag catgagaagc atcaataact 60
 tgcttgatca agttcagcac ggacggtgac attggctggt aaagggtgga aatcatatca 120
 ttaccacggt caactgccag agtgtactgc gttaaatacat tggtgccgat actaaagaaa 180
 tcaacttctt tggctaaatg acgtgcaatt gttgcggcag ccggtgtttc caccattacg 240
 ccgacttcaa ttgactcgtc aaacgcttta ccttcgtcgc gcagttcctg tttgtagatt 300
 tcgatctctt tgcgcagtgc acgcacttct tcaacagaga tgatcatcgg gaacataatg 360
 cgcaatttac cgaaagccga ggcacgcagg atagcgcgga gctgatcgcg caggatctct 420
 ttacgatcca ttgcgatacg gatagcgcgc cagccaaaga acgggttcat ttctta 476

<210> 133
 <211> 476
 <212> DNA
 <213> Escherichia coli

<400> 133
 tcctgccatt tctccgcaca tgccagtcca tttgccttca gcatgagaag catcaataac 60
 ttgcttgatc aagttcagca cggacggtga cattggctgg taaagggtg aaatcatatc 120
 attaccacgg tcaactgccg gagtgtactg cgtaaataca ttggtgccga tactaaagaa 180
 atcaacttct ttggctaaat gacgtgcgat tgttgcggca gccggtgttt ccaccattac 240
 gccgatttca attgactcgt caaacgcttt accttcgtcg cgcagttcct gttttagat 300

ttcgatctct ttgcgcagtg cacgcacttc ttcaacagag atgatcatcg ggaacataat	360
gcgcaattta ccgaaagccg aggcacgcag gatagcgcgg agctgatcgc gcaggatctc	420
tctacgatcc atcgcgatac ggatagcgcg ccagcccaag aacggattca tttctt	476

<210> 134
 <211> 476
 <212> DNA
 <213> *Citrobacter freundii*

<400> 134	
tcccgccatt tctccgcaca tgccagtcca tttgccttca gcatgagaag catcaataac	60
ttgcttgatc agcgtcagca cagatggcga catcggttgg taaaggtgtg aaatcatatc	120
attaccacgg tcaactgccg ggggtgtactg cgttaaataca ttggtgccga tactaaagaa	180
atcaacttct ttggctaaat gacgcgcaat tgttgccgca gccggtgttt ccaccatcac	240
gccaatctca atgctctcgt caaatgcttt accttcgtcg cgcagttcct gtttgtagat	300
ttcaatctct ttgcgcagtg cacgcacttc ttcaacagag atgatcattg ggaacataat	360
gcgcagttta ccgaaagcag aggcgcgcag aatcgcgcga acctggtcac gcaggatctc	420
tttacgatcc atggcgatac gcacggcacg tcagcccagg aatgggttca tctctt	476

<210> 135
 <211> 476
 <212> DNA
 <213> *Pseudomonas putida*

<400> 135	
tcccgccatt tctccgcaca tgctcactgg cttgccttca ccatgggcat cgcgcaccac	60
cgtgctcaag gcttgcagct ccgcccgggtg caggtagtcg tacaggtcgg caaccgcg	120
gttggttgcg tccaccgcca gcaggactg ggtcaggtcg ttggagccga ccgacaggaa	180
atccacctgc cgcgccagtt ccttgggtctg gtacaccgcc gcaggatatt ccaccatcac	240
gcccaccggc ggcacggcca catcggtgcc ttcgtcacgc acctcgcccc aggcgcgggtg	300
gatcagggtgc agcgttctt ccagctcgtg gatgccggaa atcatcggca gcaggatgcg	360
caggttggtc aggcctcgc tggccttgag catggcgcga gtctgcacca ggaagatttc	420
cgggtggtcg aggtgacgc ggatgccgcg ccagcctaag aatggattca tctcgt	476

<210> 136
 <211> 476
 <212> DNA

<213> *Shigella sonnei*

<400> 136

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ccggccattt caccacacat gccagtcatt ttgccttcag catgagaagc atcaataact    60
tgcttgatca agttcagcac ggacggtgac attggctggt aaaggtgtga aatcatatca    120
ttaccacggt caactgccag agtgtactgc gttaaatcat tggtgccgat actaaagaaa    180
tcaacttctt tggctaaatg acgtgcaatt gttgcggcag ccggtgtttc caccattacg    240
ccgatttcaa ttgactcgtc aaacgcttta ccttcgtcgc gcagttcctg tttgtagatt    300
tcgatctctt tgcgcagtg cgcacttct tcaacagaga tgatcatcgg gaacataatg    360
cgcaatttac cgaaagccga ggcacgcagg atagcgcgga gctgatcgcg caggatctct    420
ttacgatcca tcgcgatacg gatagcgcgc cagcccagga acggattcat ctctta      476
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<210> 137

<211> 476

<212> DNA

<213> *Listeria innocua*

<400> 137

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tcctgccatt tctccgcaca taccagtcca tttgccctct ttatgagaag catcaattac    60
catttttact aagcgtaaaa tagatggatt gtatggttgg taaaggtaag aaacgcgttc    120
attcatacgg tcagcagcca ttgtatactg aatcaagtca tttgttccga ttgagaagaa    180
atcaacttct tttgcaaatt gatcagctaa aactgcagca gcaggaattt caatcataat    240
tccaagttcg atggaatcag atacttctgt tccagcagct tttagtttcg ctttttcac    300
tagtaaaata tcgcgcgctt ggcggaattc atttactgtt gcaatcatcg ggaacataat    360
ttttaagtta ccatatacac ttgcgcgaag tagagcgcga agttgtgtac ggaataattc    420
ttcattcgca aaacaaagac gaatgcacg gaatcctaag aacgggttca tttcgt      476
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<210> 138

<211> 455

<212> DNA

<213> *Serratia marcescens*

<220>

<221> misc_feature

<222> (5)..(6)

<223> n is a, c, g, or t

<220>

<221> misc_feature

<222> (9)..(9)

<223> n is a, c, g, or t

<220>

<221> misc_feature

<222> (17)..(17)

<223> n is a, c, g, or t

<220>

<221> misc_feature

<222> (20)..(20)

<223> n is a, c, g, or t

<220>

<221> misc_feature

<222> (25)..(25)

<223> n is a, c, g, or t

<220>

<221> misc_feature

<222> (434)..(434)

<223> n is a, c, g, or t

<220>

<221> misc_feature

<222> (450)..(450)

<223> n is a, c, g, or t

<400> 138

ttctnngang gactctntcn taaanagcat caataacctg tttgatcagg ccaagcactg 60

atggggacat cggggttatag agatgagaaa tcagctcggt gccgcgatct accgccagag 120

tatactgggt tagatcggtt gtcccaatac taaagaagtc gacttctttc gccagggtgt 180

gagcgatgac cgccgcagcc ggtgtttcca ccatcacgcc cacttcgatg ctctcgtaa 240

acgccttgcc ttcttcgcgc agctgcgcct tcagcgtctc gatttcgcct ttcagatcgc 300

gcacttcttc cacggagatg atcatcgga acatgatgcg cagtttaccg aacgccgagg 360

cgcgagagat ggcgcgagc tgggcgtgca ggatttcacg gcgggccatc gcgatgcgga 420

tggcgcgcca gccnaagaac ggattcattn tctta 455

<210> 139

<211> 454

<212> DNA

<213> Salmonella enterica hadar

<220>

<221> misc_feature

<222> (444)..(444)

<223> n is a, c, g, or t

<400> 139

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ccgcacatgc cagtccattt accttctgca tgagaagcat caataacttg cttgatcaag      60
ttcagtacgg acggtgacat tggctggtaa aggtgtgaaa tcatatcatt accacgggtca    120
actgccaggg tgtactgcgt taaatcattg gtgccgatac taaagaaatc aacttctttg      180
gotaaatgac gcgcaattgt cgccgcagcc ggtgtttcca ccatcacgcc aatctcaatg      240
ctttcgtcaa atgctttacc ttcgtcacgc agttcctggt tgtagatttc aatctctttg      300
cgcagcgcgc gaacttcttc aacagagatg atcatcggga acataatgcg caatttaccg      360
aaagcggagg cacgcagaat cgcgcggaacc tggtcacgca ggatctcttt gcgatccatg      420
gcgatacgca cggcgcgcca gccnaagaac ggat                                     454

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```

<210> 140
<211> 454
<212> DNA
<213> Salmonella enteritidis

```

```

<220>
<221> misc_feature
<222> (444)..(444)
<223> n is a, c, g, or t

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```

<400> 140
ccgcacatgc cagtccattt accttctgca tgagaagcat caataacttg cttgatcaag      60
ttcagtacgg acggtgacat tggctggtaa aggtgtgaaa tcatatcatt accacgggtca    120
actgccaggg tgtactgcgt taaatcattg gtgccgatac taaagaaatc aacttctttg      180
gctaaatgac gcgcaattgt cgccgcagcc ggtgtttcca ccatcacgcc aatctcaatg      240
ctttcgtcaa atgctttacc ttcgtcacgc agttcctggt tgtagatttc aatctctttg      300
cgcagcgcgc gaacttcttc aacagagatg atcatcggga acataatgcg caatttaccg      360
aaagcggagg cacgcagaat cgcgcggaacc tggtcacgca ggatctcttt gcgatccatg      420
gcgatacgca cggcgcgcca gccnaagaac ggat                                     454

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<210> 141
<211> 454
<212> DNA
<213> Salmonella enterica Brandenburg

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<220>
<221> misc_feature
<222> (444)..(444)
<223> n is a, c, g, or t

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<400> 141
ccgcacatgc cagtccattt accttctgca tgagaagcat caataacttg cttgatcaag      60
ttcagtacgg acggtgacat tggctggtaa aggtgtgaaa tcatatcatt accacgggtca    120
actgccaggg tgtactgCGT taaatcattg gtgccgatac taaagaaatc aacttctttg      180
gctaaatgac gcgcaattgt cgccgcagcc ggtgtttcca ccatcacgcc aatctcaatg      240
ctttcgtcaa atgctttacc ttCGTcacgc agttcctggt tgtagatttc aatctctttg      300
cgcagcgcgc gaacttcttc aacagagatg atcatcgga acataatgcg caatttaccg      360
aaagcggagg cacgcagaat cgcgcgaacc tggtcacgca ggatctcttt gcgatccatg      420
gcgatacgca cggcgcgcca gccnaagaac ggat                                     454

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```

<210> 142
<211> 454
<212> DNA
<213> Salmonella enterica derby

```

```

<220>
<221> misc_feature
<222> (444)..(444)
<223> n is a, c, g, or t

```

```

<400> 142
ccgcacatgc cagtccattt accttctgca tgagaagcat caataacttg cttgatcaag      60
ttcagtacgg acggtgacat tggctggtaa aggtgtgaaa tcatatcatt accacgggtca    120
actgccaggg tgtactgCGT taaatcattg gtgccgatac taaagaaatc aacttctttg      180
gctaaatgac gcgcaattgt cgccgcagcc ggtgtttcca ccatcacgcc aatctcaatg      240
ctttcgtcaa atgctttacc ttCGTcacgc agttcctggt tgtagatttc aatctctttg      300
cgcagcgcgc gaacttcttc aacagagatg atcatcgga acataatgcg caatttaccg      360
aaagcggagg cacgcagaat cgcgcgaacc tggtcacgca ggatctcttt gcgatccatg      420
gcgatacgca cggcgcgcca gccnaagaac ggat                                     454

```

```

<210> 143
<211> 454
<212> DNA
<213> Salmonella enterica virchow

```

```

<220>
<221> misc_feature
<222> (444)..(444)
<223> n is a, c, g, or t

```



```

<400> 143
ccgcacatgc cagtccattt accttctgca tgagaagcat caataacttg cttgatcaag      60
ttcagtacgg acggtgacat tggctggtaa aggtgtgaaa tcatatcatt accacgggtca    120
actgccaggg tgtactgcgt taaatcattg gtgccgatac taaagaaatc aacttctttg      180
gctaaatgac gcgcaattgt cgccgcagcc ggtgtttcca ccatcacgcc aatctcaatg      240
ctttcgtcaa atgctttacc ttcgtcacgc agttcctggt tgtagatttc aatctctttg      300
cgcagcgcgc gaacttcttc aacagagatg atcatcgga acataatgcg caatttaccg      360
aaagcggagg cacgcagaat cgcgcgaacc tggtcacgca ggatctcttt gcgatccatg      420
gcgatacgca cggcgcgcca gccnaagaac ggat                                         454

```

```

<210> 144
<211> 454
<212> DNA
<213> Salmonella enterica paratyphi B

```

```

<220>
<221> misc_feature
<222> (444)..(444)
<223> n is a, c, g, or t

```

```

<400> 144
ccgcacatgc cagtccattt accttctgca tgagaagcat caataacttg cttgatcaag      60
ttcagtacgg acggtgacat tggctggtaa aggtgtgaaa tcatatcatt accacgggtca    120
actgccaggg tgtactgcgt taaatcattg gtgccgatac taaagaaatc aacttctttg      180
gctaaatgac gcgcaattgt cgccgcagcc ggtgtttcca ccatcacgcc aatctcaatg      240
ctttcgtcaa atgctttacc ttcgtcacgc agttcctggt tgtagatttc aatctctttg      300
cgcagcgcgc gaacttcttc aacagagatg atcatcgga acataatgcg caatttaccg      360
aaagcggagg cacgcagaat cgcgcgaacc tggtcacgca ggatctcttt gcgatccatg      420
gcgatacgca cggcgcgcca gccnaagaac ggat                                         454

```

```

<210> 145
<211> 458
<212> DNA
<213> Streptococcus thermophilus

```

```

<400> 145
ccgctcatac cagcccattt accttcagcg tgagctgcct taataacggt gttaatcaag      60
cgaaggattg atgggttata tggttggtaa aggtatgaaa cttgttcatt catacgggtca    120

```

gcagccattg tgtattggat aaggctggtt gtaccaattg agaagaaatc aacttcttta 180
gcaaattggt cagcaagcat tgctgcagct gggatttcaa tcatgatacc tacttcgatg 240
tcgtttgcaa cggcaacacc ttcagcaacc aatttagctt tttcttcttc aagaatacct 300
ttagcagtac ggaactcagt caacaaagca accattggga acatgatacg caatttaccg 360
tgaacagatg cacgaagcaa ggcacgtaat tgagtacgga acatttggtt accagtttca 420
gagatagaaa tacgtaatgc acggttaacc aagaacgg 458

<210> 146
<211> 455
<212> DNA
<213> Streptococcus suis

<220>
<221> misc_feature
<222> (450)..(450)
<223> n is a, c, g, or t

<400> 146
gccacatac cagcccatTT accttctgCG tgtgcagcct tgataacatt gttaatcaag 60
cgaaggattg atgggttata tggttggtag aggtatgaaa cttgttcatt catacgggtct 120
gcagccattg tgtactggat aaggctggtt gtaccgattg agaagaagtc aacttctttg 180
gcaaattggt ctgcaagcat tgctgctgca gggatttcaa tcatgatacc aacttggata 240
tcatccgcaa ctgctacacc ttcagccaac aagtttgctt tttcttcac aaggattgct 300
tttgctgcac ggaattcagt caacaaggca accattggga acatgatacg aagtttacca 360
tgtactgatg aacgaagaag ggcacgcaac tgagtgcgga acatttggtt accagtctca 420
gagatagaga tacgaagggc acggaaccn aagaa 455

<210> 147
<211> 449
<212> DNA
<213> Bacillus pseudomyces

<400> 147
ccgcacatac cagcccatTT tccttcttta tgagcagcat cgataacat ttttacaagg 60
cgtaaaatag atggattata cggttggtat aagtaagata cacgttcatt catacgggtct 120
gcagccattg tgtattggat taggtcggtt gttccgatag agaagaaatc aacttctttt 180
gcaaactgat ctgctaatac tgcagaagcg ggaatttcta ccatcatacc tacctcaata 240

gcacagaaa cagttgtacc agcttgaaca agtctttctt tctcttctaa taaaattgct 300
 tttgcttgac ggaattcatc aagagttgca atcattggga acataatttt taaattacca 360
 tatacgcttg cacgaagcaa tgcacgaagt tgtgtacgga acacatcttg ttcttcaagg 420
 cataagcgaa tcgcacggta acccaagaa 449

<210> 148
 <211> 450
 <212> DNA
 <213> Staphylococcus lugdunensis

<220>
 <221> misc_feature
 <222> (445)..(445)
 <223> n is a, c, g, or t

<400> 148
 ccgcacatac cagtccattt accttcttta tgagaagctt caatcacttg tttcactaga 60
 cgtaaaatag ctggattata tggttgataa aggtatgata cacgttctga catgcggtca 120
 gcagccattg tgtattgaat caaatcatta gtaccgatac tgaagaaatc aacttcttta 180
 gcaaagatat cagctaatgc agctgttgat gggatttcta ccattattcc gagctcgata 240
 tcattctgaca cgtcatgtcc ttcatTTTTT agatttctt tttcttctaa aagaagcgct 300
 ttggcatctc taaactcatt aatagtagca accattggga acataatatt taatttttcc 360
 atatgctgaa gcacgcaaaa gagcgcgcaa ctgtggtctg aaaatatcag gttgatctaa 420
 gcacaatcga atcgcacggt aaccnaagaa 450

<210> 149
 <211> 590
 <212> DNA
 <213> Cryptococcus neoformans

<400> 149
 cgacagttat gaccgaccg gatcttctgt gatggatttg agtaagagca tatatgctgg 60
 gaccgaaaag atggtgaact atgcctgaat agggcgaagc caggggaaac tctggtggag 120
 gctcgtagcg attctgacgt gcaaatcgat cgtcgaattt gggatatagg gcgaaagact 180
 aatcgaacca tctagtagct ggttcctgcc gaagtttccc tcaggatagc agaaactcgc 240
 atcagtttta tgaggtaaag cgaatgatta gaggccttg ggcgaaacg tccttaacct 300
 attctcaaac tttaaagtgt taagaagcac ttgtcactta attggacgag cgcattcgaa 360
 tgagagtttc tagtgggcca tttttggtta gcagaactgg cgatgcggga tgaaccgatc 420

gcgagggttaa ggtgccggaa tacacgctca tcagacacca caaaagggtgt tagttcatct 480
agacagcagg acggtggcca tggaagtcgg aatccgctaa ggagtgtgta acaactcacc 540
tgccgaatga actagccctg aaaatggatg gcgctcaagc gtgttaccca 590

<210> 150
<211> 480
<212> DNA
<213> Streptococcus thermophilus

<220>
<221> misc_feature
<222> (4)..(4)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (22)..(22)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (28)..(28)
<223> n is a, c, g, or t

<400> 150
ttgnaacggc ttatgctgta gnacaagnac accgaagggg caagggataa gacccgaaac 60
tctcaggttaa aaggacagaa agcattgaat gtttttaact ttcagtaata gctttgtact 120
ttcagaggtc tggttaagcc aaacctcttt ttgatgtctc ggtctaagga gattttaaac 180
gcatgttaga ctttttcact tccattgatg actttgtatg gggacctccc cttcttgtcc 240
ttcttgtagg aactgggtatc taccttaciaa tccgtcttgg acttttgcaa atcattcgtc 300
tgccataaagc ctttaaactt atctttgctg aagataaagg agagggtgat atttctagtt 360
ttgcagccct tgccacagca cttgctgcaa ctgttggtac tggtaacatt gttggtgttg 420
cgacagccat taagactggt gggcctggtg ctcttttctg gatgtggatt gctgctttct 480

<210> 151
<211> 457
<212> DNA
<213> Enterococcus villorum

<400> 151
ccgaaggggc aagggataag acccgaaact ctcaggtaaa aggacagaaa gcattgaatg 60
tttttaactt tcagtaatag ctttgtactt tcagagggtc ggttaagcca aacctctttt 120

tgatgtctcg gtctaaggag attttaaacg catgttagac tttttcactt ccattgatga	180
ctttgtatgg ggacctcccc ttcttgtcct tcttgttagga actggtatct accttacaat	240
ccgtcttgga cttttgcaaa tcattcgtct gcctaaagcc tttaaactta tctttgctga	300
agataaagga gagggtgata tttctagttt tgcagccctt gccacagcac ttgctgcaac	360
tgttggtact ggtaacattg ttggtgttgc gacagccatt aagactggtg ggccctggtgc	420
tcttttctgg atgtggattg ctgctttctt tggaatg	457

<210> 152
 <211> 498
 <212> DNA
 <213> Streptococcus pyogenes

<220>
 <221> misc_feature
 <222> (4)..(4)
 <223> n is a, c, g, or t

<400> 152	
ttanaggcgc cgaggggcaa ggcatactgc tcaatctctc aggcaaaagg acagaaggta	60
aaatacaaac accattaaga acagtcttag tcttttttgt gtttgctgtt ttatcattgc	120
ttcagaagtt gtctcaaaga aagagatagc ttttttcttt tggcgtcttc gatgactttt	180
aggagagaaa gatgatagca ctcgttaaat taattgataa ccttgtttgg ggaccgcccc	240
tcttaatttt attggttggg acggggattt accttaccag tcatttagga ttaattcaaa	300
tcttaaaaact accaagagcc tttaaactca ttttttcaga tgacgaagga catggagata	360
tttcatcctt tgctgctctt gcaactgccc ttgccgctac tgtcggaact ggtaacattg	420
ttggggttgc cactgctatc aagtctggtg gtccctggagc gctcttttgg atgtgggttg	480
ccgctttttt tggaatgg	498

<210> 153
 <211> 476
 <212> DNA
 <213> Streptococcus mutans

<400> 153	
gcgccgaggg gcaaggctgt ttgctcaaac tctcaggcaa aaggacagaa aagaaaaaaa	60
gaatttttaa tgttgaaaca attcttatct tctaactcta gaggtatcgt caagtattga	120
caacctcttt tttagatttc atttcggttt atgaggagaa aagtttatat gttaacattt	180
tttaaagctc tagacagctt tgtctggggg gttcccctat tagttctttt agtcggtact	240

ggaatttatt tgagtactcg cttaagatta ttgcagggtat tgaaactccc tttagccttt 300
aaactcatct ttgccgagga caaaggggaa ggtgatattt cgagttttgc ggcttttagct 360
actgctcttg ctgccactgt tggaactgga aatatcggtg gtgttgccac tgcaatcaaa 420
gctggcggtc cgggagcact cttttggatg tggatagcag ctttttttgg aatggc 476

<210> 154
<211> 576
<212> DNA
<213> Streptococcus agalactiae

<220>
<221> misc_feature
<222> (31)..(31)
<223> n is a, c, g, or t

<400> 154
aagtagcaac atctttgtat tgacaccaag natgtgctct aggcgccgaa ggggcaagaa 60
gagtaaaaca actcctcaa tctctcaggc aaaaggacag aagctaaaag ccaatattaa 120
taatgagtag taagcttatt aagtttacta ctacctttat ttgtgcgctt tttagctagc 180
atctttcaga agttatctct tttagagata acttttttcg tttcattaca gaatccatag 240
gtatgtcatg tatcaaagga gaacatatgc taacactttt tactcatatc aatagcttcg 300
tttggggtcc acctttactt gctttattag tcggaacagg tatttaccta tcatttcgct 360
taggttttgt tcaattgaga caactttcta gagctttcaa attgattttc cgagaagata 420
acggacaagg ggatatttca agttatgctg ctcttgcaac tgctcttgct gcaacggtag 480
ggacaggtaa tatcgttggg gtggctacgg ctattaaatc tggaggacca ggagctttgt 540
tttggatgtg ggtagccgcc ttttttggaa tggccc 576

<210> 155
<211> 440
<212> DNA
<213> Streptococcus sanguis

<220>
<221> misc_feature
<222> (237)..(237)
<223> n is a, c, g, or t

<400> 155
tagaaccgct caaactctca ggtaaaagga cagagcgaag aggcagggat ttccctactc 60

cagcacatcc aggagtacat gttttgcatg tgctctttct ttttctcggg gtgaaaagga 120
gcttatatca tgttggaat attgaatcgt ctggattctt ttgtttgggg tccgcccctg 180
ctcattttgc tggttggtac tggatatctat ctcagtctgc gtctgggctt gctgcanatt 240
tttcgacttc ctctgacctt tcggctaatac tttgtatcgg acgaggagca tcagggcgat 300
gtctctagct ttgcggctct ctgtacggct ctagccgcga ctgtgggaac gggaaatatac 360
atcggagtgg caactgccat taaaaccggg ggaccggggg cgctcttctg gatgtgggtg 420
gctgctttct ttggaatggc 440

<210> 156
<211> 450
<212> DNA
<213> Streptococcus oralis

<400> 156
gggcaaggca ggtaactgct caaactctca ggtaaaagga cagagctagg atagaccgct 60
ttttggcatt tatctaagca ttccagagta catgtatctt gcatgtactc tttcttttgg 120
ggttgaaaga taggagaagg acatgttaga attgcttaaa gcgcttgatg cttttgcttg 180
ggggcctccc ctcttgatct tattggtcgg aacgggtatc tatttgacca tccgactggg 240
ccttttgcag gttactcgtc tccctaaggc ctttcagttg atctttacca aggacaaggg 300
gcacggcgat gtgtcgagct ttgctgctct ctgtacggct ctagcagcca cagttggtac 360
gggaaatatac atcggggtag cgacagccat taaggttgga ggaccagggg ccctcttttg 420
gatgtggatg gcggccttct ttggaatggc 450

<210> 157
<211> 498
<212> DNA
<213> Streptococcus suis

<220>
<221> misc_feature
<222> (12)..(12)
<223> n is a, c, g, or t

<400> 157
ttttggcccg angggcaagg tagtcctgct tggaaaagta gagctactga aactctcagg 60
taaaaggaca gagcggtgaa aaataggctt tttctgtatt ttacagttg attctagagg 120
ttgaagtgtt cagcctcttt ttgtttttcc ggcagcttta tcggggttaga aacgcttagg 180
aggaactatg ttagaactat ttaaggctat caacaatctt gtttggggac cgccccctctt 240

gttactattg gtcggaacgg gtgtctatTT taccctacgg ttgggagtat ttcagattgg 300
caaattgccg acggcttttc gtctgatttt ctccagtac cagtctggtc agggagatgt 360
gtccagtttt gcggtctctgt gtacggcttt agcagcgaca gttggtacag gaaatatcgt 420
cggagttgcg acagctatta ctacaggtgg tcctggggct cttttctgga tgtgggttgc 480
ggcctttttt ggaatggc 498

<210> 158
<211> 469
<212> DNA
<213> *Staphylococcus simulans*

<400> 158
atccggcttt gagtttaaag ctattgatgc ttttaattacg aacttccatc tgccgaagtc 60
cacacttgtc atgttagttt cagcattcag ttcaaaacaa tatattttta atgcatacca 120
aacagctgtc gaaatgaaat atcgattcct cagctttggg gatgcaatgt taattattta 180
agggagtcgt gaaaaagtta tgctgcagt aacttatgaa catatcaaaa catgtaaaca 240
atccggtgca aggttaggaa tcgtgcatac accgcacggg tcgtttgaaa cacctatggt 300
tatgccagta ggaactcaag ctaccgttaa aactatgagt cctgaagaac taagggaat 360
taatgcacaa atcatttttag gcaacacata ccatttatgg ttgcaaccgg gcaatgacat 420
tattaaacgc gcggttggtt tgcataaatt tatgatttgg aatggccac 469

<210> 159
<211> 467
<212> DNA
<213> *Enterococcus faecalis*

<400> 159
gtaaaggcac cgaaggggca aggcaggtaa ctgctcaaac tctcaggtaa aaggacagag 60
ctaggataga ccgctttttg gcatttatct aagcattcca gagtacatgt atcttgcag 120
tactctttct tttgggggtt aaagatagga gaaggacatg ttagaattgc ttaaagcgct 180
tgatgctttt gcttgggggc ctccctctt gatcttattg gtcggaacgg gtatctatTT 240
gaccatccga ctgggccttt tgcaggttac tcgtctccct aaggcctttc agttgatctt 300
taccaaggac aaggggcacg gcgatgtgtc gagctttgct gctctctgta cggtctagc 360
agccacagtt ggtacgggaa atatcatcgg ggtagcgaca gccattaagg ttggaggacc 420
aggggccctc ttttggtatg ggatggcggc cttctttgga atggccc 467

<210> 160
 <211> 468
 <212> DNA
 <213> *Streptococcus pneumoniae*

<400> 160
 gtaaagggcac cgaaggggca aggcaggcaa ctgctcaaac tctcaggtaa aaggacagag 60
 ctaggataga ccgcttttta gcatttatct aagcattcca gagtacatgt atcttgcattg 120
 tgctctttct tttgggggttg aaacgatagg agaaggaaat gttagaattg cttaaatacaa 180
 tcgatgcttt tgcttgggga ccgcccctct tgattttatt ggtcgggaaca gggatttacc 240
 taaccatgcg gctaggactc ttgcaggttt tgcgtctgcc caaggccttt cagcttattt 300
 ttatccagga taagggacat ggtgatgtat ccagttttac agctctgtgt acagccttgg 360
 catcaactgt tggaacagga aatatcatag gagttgcgac ggctatcaag gttgggtggac 420
 caggagctct attttggatg tggatggcgg ttttctttgg aatggccc 468

<210> 161
 <211> 463
 <212> DNA
 <213> *Enterococcus durans*

<220>
 <221> misc_feature
 <222> (1)..(1)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (3)..(3)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (21)..(21)
 <223> n is a, c, g, or t

<400> 161
 ngncggaggg gcaaggtcag nacaactgct caaactctca ggtaaaagga cagagctagg 60
 atagaccgct ttttagcatt tatctaagca ttccagagta catgtatctt gcatgtgctc 120
 tttcttttgg ggttgaaacg ataggagaag gaaatgttag aattgcttaa atcaatcgat 180
 gcttttgctt ggggaccgcc cctcttgatt ttattggctg gaacagggat ttacctaacc 240
 atgcggctag gactcttgca ggttttgcgt ctgccaagg cctttcagct tatttttatc 300
 caggataagg gacatggtga tgtatccagt ttacagctc tgtgtacagc cttggcatca 360

actgttggaa caggaaatat cataggagtt gcgacggcta tcaaggttgg tggaccagga 420
gdtctatttt ggatgtggat ggcggttttc tttggaatgg ccc 463

<210> 162
<211> 517
<212> DNA
<213> Bacillus anthracis

<220>
<221> misc_feature
<222> (1)..(1)
<223> n is a, c, g, or t

<400> 162
ngaggaaaac gagcaccgaa ggagcaaata cgctactata gcggataatc tctcaggtaa 60
aaggacagag acaagcgaaa gaaaatgccg atttgtatcg gtttattttt ctatcccttg 120
tttctccaga gaccatttca tttacttgaa gtggttttta ttttttctaa aaaaggagaa 180
taaagatgga gacagtaagt aaagtattag aacaaatcaa tcactatgtg tggggattac 240
caacgttatt gttactcggt ggtactggta ttattctcac agtgcgttta aaagggttac 300
agtttagtaa actattatac gctcacaac tagcttttaa aaaatcagaa gatacatctt 360
cctctggaga tattagccac ttccaagcgc ttatgacagc tatggcggca acgattggta 420
tgggaaatat agctggtggt gcaactgctg tgacgatcgg tggacctggt gcaatctttt 480
ggatgtggat tactgctttg tttggaatgg cccaaaa 517

<210> 163
<211> 539
<212> DNA
<213> Bacillus anthracis Sterne

<220>
<221> misc_feature
<222> (2)..(2)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (4)..(4)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (22)..(22)
<223> n is a, c, g, or t

<400> 163
tncncgcttt aaatagcgta gnaggcaaaa cgagcaccga aggagcaaat ccgctactat 60
agcggataat ctctcaggta aaaggacaga gacaagcgaa agaaaatgcc gatttgtatc 120
ggttttatatt tctatccctt gtttctccag agaccatttc atttacttga agtggttttt 180
atTTTTtcta aaaaaggaga ataaagatgg agacagtaag taaagtatta gaacaaatca 240
atcactatgt gtgggggatta ccaacgttat tggtactcgt tgggtactggg attattctca 300
cagtgcgcttt aaaagggttta cagtttagta aactattata cgctcacaaa ctagctttta 360
aaaaatcaga agatacatct tcctctggag atattagcca cttccaagcg cttatgacag 420
ctatggcggc aacgattggg atgggaaata tagctgggtg tgcaactgct gtgacgatcg 480
gtggacctgg tgcaatcttt tggatgtgga ttactgcttt gtttggaatg gcccaaaaa 539

<210> 164
<211> 539
<212> DNA
<213> Bacillus anthracis Butare

<220>
<221> misc_feature
<222> (1)..(2)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (4)..(4)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (6)..(6)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (11)..(11)
<223> n is a, c, g, or t

<400> 164
nnncncgct ntaaatacg tagaggcaaa acgagcaccg aaggagcaaa tccgctacta 60
tagcggataa tctctcagg aaaggacag agacaagcga aagaaaatgc cgatttgtat 120
cggtttatatt ttctatccct tgtttctcca gagaccattt catttacttg aagtggtttt 180
tattttttct aaaaaggag aataaagatg gagacagtaa gtaaagtatt agaacaaatc 240
aatcactatg tgtggggatt accaacgtta ttgttactcg ttggtactgg tattattctc 300

acagtgcgtt taaaagggtt acagtttagt aaactattat acgctcacia actagctttt 360
 aaaaaatcag aagatacatc ttcctctgga gatattagcc acttccaagc gcttatgaca 420
 gctatggcgg caacgattgg tatgggaaat atagctggtg ttgcaactgc tgtgacgatc 480
 ggtggacctg gtgcaatctt ttggatgtgg attactgctt tgtttggaat ggcccaaaa 539

<210> 165
 <211> 538
 <212> DNA
 <213> Bacillus anthracis

<220>
 <221> misc_feature
 <222> (2)..(2)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (4)..(4)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (12)..(12)
 <223> n is a, c, g, or t

<400> 165
 tntntcgctt tnatagcgta gtaggcaaaa cgagcaccga aggagcaaat ccgctactat 60
 agcggataat ctctcaggtt aaaggacaga gacaagcgaa agaaaatgcc gatttgtatc 120
 ggttttatatt tctatccctt gtttctccag agaccatttc atttacttga agtggttttt 180
 attttttcta aaaaaggaga ataaagatgg agacagtaag taaagtatta gaacaaatca 240
 atcactatgt gtggggatta ccaacggtat tggtactcgt tgggtactggt attattctca 300
 cagtgcgttt aaaagggtta cagtttagta aactattata cgctcaciaa ctagctttta 360
 aaaaatcaga agatacatct tctctggag atattagcca cttccaagcg cttatgacag 420
 ctatggcggc aacgattggt atgggaaata tagctggtgt tgcaactgct gtgacgatcg 480
 gtggacctgg tgcaatcttt tggatgtgga ttactgcttt gtttggaatg gcccaaaa 538

<210> 166
 <211> 541
 <212> DNA
 <213> Bacillus anthracis Coda-Cerva

<220>
 <221> misc_feature
 <222> (3)..(3)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (5)..(5)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (7)..(7)
 <223> n is a, c, g, or t

<400> 166
 ctntncncgc tttaaatagc gtagaggcaa aacgagcacc gaaggagcaa atccgctact 60
 atagcggata atctctcagg taaaaggaca gagacaagcg aaagaaaatg ccgatttgta 120
 tcggttttatt tttctatccc ttgtttctcc agagaccatt tcatttactt gaagtggttt 180
 ttatTTTTTtc taaaaaagga gaataaagat ggagacagta agtaaagtat tagaacaat 240
 caatcactat gtgtggggat taccaacgtt attgttactc gttggtactg gtattattct 300
 cacagtgcgt ttaaaagggt tacagtttag taaactatta tacgctcaca aactagcttt 360
 taaaaaatca gaagatacat ctctctctgg agatattagc cacttccaag cgcttatgac 420
 agctatggcg gcaacgattg gtatgggaaa tatagctggg gttgcaactg ctgtgacgat 480
 cgggtggacct ggtgcaatct tttggatgtg gattactgct ttgtttggaa tggcccaaaa 540
 a 541

<210> 167
 <211> 537
 <212> DNA
 <213> Bacillus anthracis

<220>
 <221> misc_feature
 <222> (2)..(2)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (4)..(4)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (11)..(11)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (533)..(533)
 <223> n is a, c, g, or t

 <400> 167
 tncncgcttt naatagcgta gaggcaaaac gagcaccgaa ggagcaaadc cgctactata 60
 gcggataatc tctcaggtaa aaggacagag acaagcgaaa gaaaatgccg atttgtatcg 120
 gtattatttt ctatcccttg tttctccaga gaccatttca ttacttgaa gtggttttta 180
 ttttttctaa aaaaggagaa taaagatgga gacagtaagt aaagtattag aacaaatcaa 240
 tcactatgtg tggggattac caacgttatt gttactcggt ggtactggta ttattctcac 300
 agtgcgttta aaagggtttac agtttagtaa actattatac gtcacaaaac tagcttttaa 360
 aaaatcagaa gatacatctt cctctggaga tattagccac ttccaagcgc ttatgacagc 420
 tatggcggca acgattggta tgggaaatat agctgggtgt gcaactgctg tgacgatcgg 480
 tggacctggt gcaatctttt ggatgtggat tactgctttg tttggaatgg ccnaaaa 537

<210> 168
 <211> 531
 <212> DNA
 <213> Bacillus cereus

<400> 168
 tgcttgctag agcgcggagg aaaacgagca ccgaaggagc aaatccgcta ctttagcgga 60
 taatctctca ggtaaaagga cagagacaag cgaaagaaaa agccgattgt atcggtttat 120
 ttttctatcc cttgtttctc cagagaccat ttcatttact tgaagtgggt tttatttttt 180
 ctaaaaaagg agaataaaga tggagacagt aagtaaagta ttagaacaac tgaatcaata 240
 cgtgtgggga ttaccaactt tgttgctact cgttggaaca ggtatcattc tcacagtgcg 300
 tttaaaaggt ttacagttta gtaaaactatt atacgctcac aaactagcat ttaaaaaatc 360
 agaagatgcc tcttcttctg gagatattag tcacttccaa gcacttatga cagctatggc 420
 cgcaacgatt ggtatgggaa atatagccgg tggtgcaaca gctgttacia ttggtgggtcc 480
 tggtgcaata ttttgatgtt ggattaccgc tttatttggg atggcccaaa a 531

<210> 169
 <211> 527
 <212> DNA
 <213> Bacillus cereus

<400> 169

tagcagtcgc ggcggaaaaa cgagcaccga aggagcaaat ccgctacttt agcggataat	60
ctctcaggta aaaggacaga gacaagcgaa agaaaaagcc gattgtatcg gtttattttt	120
ctatcccttg tttctccaga gaccatttca tttacttgaa gtgggtttta ttttttctaa	180
aaaaggagaa taaagatgga gacagtaagt aaagtattag aacaactaaa tcaatacgtg	240
tggggattac caactttggt gctactcgtt ggaacaggta tcattctcac agtgcgtttg	300
aaaggtttac agtttagtaa actattatac gctcacaac tagcgtttta aaaatcagaa	360
gatacttctt cttctggaga tatttagtcac ttccaagcac tcatgacagc tatggccgca	420
acgattggta tgggtaatat agccggtgtt gcaacacggg ttacaattgg tggctcctgg	480
gcaatatttt ggatgtggat taccgcttta tttggaatgg cccaaaa	527

<210> 170
 <211> 519
 <212> DNA
 <213> *Bacillus thuringiensis* serovar *israelensis*

<400> 170	
tatagcgcag aggaaaacga gcaccgaagg agcaaatccg ctactatagc ggataatctc	60
tcaggtaaaa ggacagagac aagcgaaaga aaatgccgat ttgtatcggg ttatttttct	120
atcccttggt tctccagaga ccatttcatt tacttgaagt gggttttatt tttttctaaa	180
aaaggagaat acagatggag acagtaagta aagtgttaga acaaatcaat cactatgtgt	240
ggggactacc aacgttggtt ttactcgttg gtactggtat cattctcaca gtgcgtttta	300
aaggtttaca gtttagtaaa ctattatacg ctcaaaact agctttttaa aaatcagaag	360
atacatcttc ttctggagat attagccact tccaagcgct tatgacagct atggcggcaa	420
cgattgggtat gggaaatatc gctggtgttg caacagctgt gacaatcggg ggtcccgggtg	480
caatcttttg gatgtggatt actgctttgt ttggaatgg	519

<210> 171
 <211> 522
 <212> DNA
 <213> *Bacillus myco?es* serovar

<400> 171	
gtggaggaaa gagagcaccg aaggagcaaa tccgctagct agtatagcgg ataatctctc	60
aggtaaaagg acagagacaa gcgaaagaaa atgccgattt ggatcggttt atttttctat	120
cacttgtttc tccagagacc atttcatttt gtgaagtggg tttttatttt ttctaaaaag	180
gagaataaag atggagacag taagtaaagt actagaacaa atcaatcatt acgtatgggg	240

attaccaacc ttgttcctac tcgttggAAC tggaatcatt cttacagtgc gtctaaaagg 300
 ttacagttt agtaaactat tatacgctca caaactagct tttaaaaaat cagaagacac 360
 atcttctact ggagatatta gtcattttca agcacttatg accgctatgg cagcaacaat 420
 tggaatggga aatatagctg gtgtcgcaac cgctgttaca attggtggtc ccggtgcaat 480
 attttgatg tggattaccg ccctgtttgg aatggcccaa aa 522

<210> 172
 <211> 530
 <212> DNA
 <213> Bacillus myco?es serovar

<220>
 <221> misc_feature
 <222> (458)..(458)
 <223> n is a, c, g, or t

<400> 172
 cgcttctata gcgcggagga aaacgagcac cgaaggagca aatccgctaa tctagcggat 60
 aatctctcag gtaaaaggac agagacaagc gaaagaaaat gccgatttgt atcggtttat 120
 ttttctatcc cttgtttctc cagagaccat ttcatctcct tgaagtgggt tttatTTTT 180
 ctaaaaaagg agaatacaga tggagacagt aagtaaagta ttagaacaaa ttaatcagta 240
 tgtgtggggg ttgccaactt tattgctact cgttggaact ggtatcattc tcacagtgcg 300
 cttaaaagggt ttacagttta gtaaactaat atacgctcac aaacttgctt ttaaaaaatc 360
 agaggatata tcatcttctg gagatattag tcacttccaa gcactgatga cggctatggc 420
 tgcaacgatt ggtatgggaa atatagcagg tgtcgcanct gctgtgacga tcggtggacc 480
 cggtgcgata ttctggatgt ggattaccgc gttgttttga atggcccaaa 530

<210> 173
 <211> 515
 <212> DNA
 <213> Bacillus thuringiensis serovar Kurstaki

<400> 173
 gaggaaacag agcaccgaag gagcaaatcc gcttatatta gcggataatc tctcaggtaa 60
 aaggacagag acaagcgaaa gaaaacgcgc atttgtatcg gtttattttt ctattccttg 120
 tttctccaga gaccatttca tttatgtgaa gtgggttttt attttttcta aaaggagaat 180
 aaagatggag acagtaagta aagtattaga acaaatcaat cactacgtat ggggattacc 240

gaccttattc cttctaatacg gaactggaat cattctcaca gtgcgcctaa aaggtttaca 300
gtttagtaga ctattatacg ctacaaaact agcatttcga aaatcagaag acacatcttc 360
tttgggagat attagtcatt tccaagcact catgacagca atggccgcaa ctattgggat 420
gggaaatata gccggtgtcg caacagctgt tacaatcggg gggccagggg caatattttg 480
gatgtggatc actgccttgt ttggaatggc ccaaa 515

<210> 174
<211> 533
<212> DNA
<213> Enterococcus faecium

<400> 174
gacggaattc tggagagacc ttattaggcg ccgaaggggc aaggcatact gctcaatctc 60
tcaggcaaaa ggacagaagg tagaatacaa acaccattaa gaacagtctt agtctttttt 120
gtgtttgctg ttttatcatt gcttcagaag ttgtctcaaa gaaagagata gcttttttct 180
tttggcgtct tcgatgactt ttaggagaga aagatgatag cactcgtaa attaattgat 240
aaccttgttt ggggaccgcc cctcttaatt ttattggttg ggacggggat ttaccttacc 300
agtcatttag gattaattca aatcttaaaa ctaccaagag cctttaaaact cattttttca 360
gatgacgaag gacatggaga tatttcatcc tttgctgctc ttgcaactgc ccttgccgct 420
actgtcggaa ctggtaacat tgttgggggt gccactgcta tcaagtctgg tagtcctgga 480
gcgctctttt ggatgtgggt tgccgctttt tttggaatgg caacaaaata cgc 533

<210> 175
<211> 536
<212> DNA
<213> Enterococcus casseliflavus

<220>
<221> misc_feature
<222> (2)..(2)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (70)..(70)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (76)..(76)
<223> n is a, c, g, or t

<400> 175
 gnaccggaat tctgagagac cttattaggg cgccggaagg ggcaaggcat actgctcaat 60
 ctctcaggcn aaaggncaga aggtaaaata caaacacccat taagaacagt cttagtcttt 120
 tttgtgtttg ctgttttatc attgcttcag aagttgtctc aaagaaagag atagcttttt 180
 tcttttggcg tcttcgatga cttttaggag agaaagatga tagcactcgt taaattaatt 240
 gataaccttg tttggggacc gccctcttta attttattgg ttgggacggg gatttacctt 300
 accagtcatt taggattaat tcaaacttta aaactaccaa gagcctttta actcattttt 360
 tcagatgacg aaggacatgg agatatttca tcctttgctg ctcttgcaac tgcccttgcc 420
 gctactgtcg gaactggtaa cattgttggg gttgccactg ctatcaagtc tgggtggtcct 480
 ggagcgctct tttggatgtg ggttgccgct ttttttgaa tggccacaaa atacgc 536

<210> 176
 <211> 508
 <212> DNA
 <213> *Enterococcus flavescens*

<400> 176
 aggcgccgaa ggggcaaggc atactgctca atctctcagg caaaaggaca gaaggtaaaa 60
 taaaaacacc attaagaaca gtcttagtct tttttgtgtt tgctgtttta tcattgcttc 120
 agaagtgtc tcaaagaaag agatagcttt tttcttttgg cgtcttcgat gacttttagg 180
 agagaaagat gatagcactc gttaaattaa ttgataacct tgtttgggga ccgccctct 240
 taattttatt ggttgggacg gggatttacc ttaccagtca tttaggatta attcaaactc 300
 taaaactacc aagagccttt aaactcattt tttcagatga cgaaggacat ggagatat 360
 catcctttgc tgctcttgca actgcccttg ccgctactgt cggaactggg aacattgttg 420
 gggttgccac tgctatcaag tctggtggtc ctggagcgct cttttggatg tgggttgccg 480
 ctttttttgg tatggccaca aaatacgc 508

<210> 177
 <211> 498
 <212> DNA
 <213> *Enterococcus gallinarum*

<400> 177
 gaacggaatt ctggagagac cgtaaaggca ccgaaggggc aaggcaggta actgctcaaa 60
 ctctcaggta aaaggacaga gctaggatag accgcttttt ggcatttatc taagcattcc 120
 agagtacatg tatcttgcac gtactctttc ttttgggggtt gaaagatagg agaaggacat 180

gttagaattg cttaaagcgc ttgatgcttt tgcttggggg cctcccctct tgatcttatt 240
 ggtcggaacg ggtatctatt tgaccatccg actgggcctt ttgcagggtta ctcgctctccc 300
 taaggccttt cagttgatct ttaccaagga caaggggcac ggcgatgtgt cgagctttgc 360
 tgctctctgt acggctctag cagccacagt tggtagcggg aatatcatcg gggtagcgac 420
 agccattaag gttggaggac caggggccct cttttggatg tggatggcgg ctttctttgg 480
 aatggcaact aaatacgc 498

<210> 178
 <211> 497
 <212> DNA
 <213> *Enterococcus raffinosus*

<400> 178
 gacggaattc tggagagacc gttaaaggcac cgaaggggca aggcaggtaa ctgctcaaac 60
 tctcaggtaa aaggacagag ctaggataga ccgctttttg gcatttatct aagcattcca 120
 gagtacatgt atcttgcatt tactctttct tttgggggtg aaagatagga gaaggacatg 180
 ttagaattgc ttaaagcgct tgatgctttt gcttgggggc ctcccctctt gatcttattg 240
 gtcggaacgg gtatctatct gaccatccga ctgggccttt tgcagggttac tcgtctccct 300
 aaggcctttc agttgatctt taccaaggac aaggggcacg gcgatgtgtc gagctttgct 360
 gctctctgta cggctctagc agccacagtt ggtacgggaa atatcatcgg ggtagcgaca 420
 gccattaagg ttggaggacc aggggccctc ttttggatgt ggatggcggc cttctttgga 480
 atggccacca aatacgc 497

<210> 179
 <211> 480
 <212> DNA
 <213> *Streptococcus mitis*

<220>
 <221> misc_feature
 <222> (3)..(3)
 <223> n is a, c, g, or t

<400> 179
 atnttaaggc acccaagggc aaggtcaggc aactgctcaa actctcaggt aaaaggacag 60
 agctaggata gaccgctttt tagcatttat ctaagcattc cagagtacat gtatcttgca 120
 tgtgctcttt cttttggggg tgaaaagata ggagaaggaa atgttagaat tgcttaaadc 180
 aattgatgct tttgcttggg gtccaccctt cttgattcta ttggtcggga cagggattta 240

cctaactgct cgtctaggcc tcttgcaggt tttgcgtttg cctaaggcct ttcagcttat	300
ttttactaag gacaaggggc atggcgatgt atccagcttt gcggccttgt gtacagccct	360
agcagcgaca gttggtacgg gaaatattat cggggtggcg acggctatca aggtcgggtg	420
cccaggagcc ctcttttggg tgtggatggc cgctttcttt ggaatggccc aaaataccgc	480

<210> 180
 <211> 598
 <212> DNA
 <213> Streptococcus canis

<220>
 <221> misc_feature
 <222> (1)..(1)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (6)..(6)
 <223> n is a, c, g, or t

<400> 180	
ntagtncttt ttaatgacac tagtgacctt tcgttagtat gtttttaagg actgagtatt	60
gtaatactaa catgaaagaa ctagacaggc gccgaagggg caaggctaga cacacagcta	120
gctcaaactc tcaggcaaaa ggacagaaga taagaatcga ttaacaggta aggtgtatta	180
tctttgtcag tctttctatc acttttcagg agttatcaact acgataactc cttttttcta	240
ttctaactgt catcatagga cgctatgttt tattaggaga cttattcgta tatgctaaac	300
ttttttacaa tgctagatga tatgggtctgg ggtgccccac tgcttattct gttggtggga	360
acagggattt atttaactgt tcggcttggc ttactccagg ttttaaaatt acctaaagcc	420
tttaaattaa ttttcgcaga cgataaaggc caaggggata tttctagttt tgccgctctt	480
gctactgctc ttgcagcaac agtaggtact ggtaacatcg ttggtgtagc aacagctatc	540
aaagctggtg gtccctggagc cctattttgg atgtggattg ctgctttctt tggaatgg	598

<210> 181
 <211> 1680
 <212> DNA
 <213> Listeria monocytogenes

<400> 181	
gttagaaaaa ggaagttcta ttgtagcatc gccaaaaatc catcaaacct tattagataa	60
ctacctgcct taaagaaagc gctcaacata aaaaaacttg ttttcagaaa ataaaaatcg	120

tgccaaatcg gctcagctat gctataatag gtaagttgat ttaaacgaga cgatagcgac	180
ggaggaaaat aaatctatct tctctcttct tttggctaata cttcacgata aatgtttgga	240
tttttaattt aggaggaaac aagattgaat ttaagaaatg atattcgtaa tgtagcaatt	300
attgcccacg ttgaccatgg taaaacaact ctagtagacc aattattacg ccagtcaggc	360
acattccgcg acaatgaaac agttgcagaa cgcgcaatgg acaacaatga tttagaaaga	420
gaacgcggta ttacaatttt agcgaaaaat acagcgatta agtatgaaga tacacgtgta	480
aacatcatgg atacacctgg acacgccgat ttcggtggag aagtagaacg tatcatgaaa	540
atggttgatg gtgttctttt agtagtggac gcgtatgaag gtacgatgcc tcaaacacgt	600
tttgtactaa aaaaagcact agaacaaaac ctaactccaa tcgtagtagt aaacaaaatt	660
gaccgtgact ttgctcgccc agaagaagtt gttgatgaag tattagaatt attcatcgaa	720
ctaggcgcaa acgacgatca attagaattc ccagttgttt atgcttctgc aatcaacgga	780
acttcaagct atgattccga tccagcagaa caaaaagaaa caatgaaacc acttttagac	840
acaattatcg aacatatccc ggctccagtt gataatagcg acgaaccatt acaattccaa	900
gtatcattac ttgattataa tgactatggt ggtcgtatcg gtattggccg cgtattccgt	960
ggaacaatgc acgtgggaca aacagttgct ttaattaaac ttgatggcac agtaaaacaa	1020
ttccgtgtaa cgaaaatggt cggtttcttc ggactaaaac gtgacgaaat taaagaagca	1080
aaagctggtg atttagtagc attagcaggt atggaagaca tcttcggttg tgaaacagta	1140
acaccatttg accaccaaga agcacttccg ttattacgta ttgatgagcc aaccttgcaa	1200
atgactttcg taacaaataa cagtcctttc gctggctgtg aaggtaaaca cgtaacaagc	1260
cgtaaaattg aagaacgttt acttgacagag cttcaaacgg acgtatcttt acgcgtagag	1320
ccaacagctt cccctgacgc ttgggtagtt tctggctgtg gtgagcttca tttatccatt	1380
ttgatcgaaa caatgcgtcg cgaaggttat gaattacaag tttctaaacc agaagtaatc	1440
atccgtgaaa ttgatggcgt gaaatgtgaa ccagtagaag atgttcaaata tgatactcca	1500
gaagaattca tgggttccgt tattgaatct atcagccaac gtaaaggcga aatgaaaaac	1560
atgattaacg atggcaacgg acaagttcgt ttacaattca tggttccagc tcgtggctta	1620
atcggttata caactgattt cctttcaatg actcgtgggt atggtattat caaccacaca	1680

<210> 182
 <211> 1620
 <212> DNA

<213> *Listeria innocua*

<400> 182

ataaaaaaac tcattttcag aaaataaaaa tagtgctaaa tccgcttagc tatgctataa	60
taggtaagtt gatttaaacg agacgatagc gacggaggaa aataaatcta ttttcctctt	120
tcttttggt aatcttcacg ataaatgttt ggatttttaa tttaggagga aacaagattg	180
aatttaagaa acgatattcg taatgtagca attattgccc acgttgacca tggtaaaact	240
acactagtag accaattact acgccaatca ggtactttcc gcgacaatga aacagttgca	300
gaacgtgcaa tggacaacaa tgatttagaa agagaacgcg gtattacaat ttttagcgaaa	360
aatacagcaa ttaagtatga agatacacgc gtaaacaatca tggatacacc tggacacgcc	420
gattttggtg gagaagtaga acgtatcatg aaaatggttg atgggtgttct tttagtagtg	480
gacgcgtatg aagggtactat gcctcaaaca cgttttgtac taaaaaaagc actagaacaa	540
aacctaactc caatcgtagt agtaaacaaa attgaccgtg actttgctcg cccagaagaa	600
gttggtgatg aagtactaga attattcatc gaactaggtg cgaacgacga tcaattagaa	660
ttcccagttg tttatgcttc tgcaattaac ggaacttcaa gctttgaatc cgacccagca	720
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cgtttacaat tcatgggttc agctcgtgga ttaatcgggt atacaactga tttcctttca	1560
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<210> 183
 <211> 1380
 <212> DNA
 <213> *Bacillus cereus*

<400> 183
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 aacaacactt gttgaccagt tattacgtca agcggggact ttccgtgcga acgaacacgt 240
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 gaaaaatata gcgattcact atgaagataa aagaattaac atttttagata cacctgggtca 360
 cgctgacttc ggtggagaag tagaacgtat catgaaaatg gttgatgggtg ttttacttgt 420
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<210> 184
 <211> 1680
 <212> DNA

<213> *Bacillus anthracis*

<400> 184

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gtcaagcggg gactttccgt gcgaacgaac acgttgaaga acgcgcaatg gattcaaatg	240
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ataaaagaat taacatttta gatacaccag gtcacgctga cttcgggtgga gaagtagaac	360
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aagggtgtct agtttcactt gaaacaggaa aagcatcaca atacggtatt atgcaagttg	1620

aagaccgtgg tgtaatcttc gttgaaccag gtacagaagt atatgctggt atgattgttg 1680

<210> 185

<211> 1270

<212> DNA

<213> Staphylococcus aureus

<400> 185

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 cgttgaccat ggtaaaacaa ctttagtaga tgagttgtta aaacaatctg gtatattcag 180
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<210> 186

<211> 1320

<212> DNA

<213> *Staphylococcus epidermidis*

<400> 186

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ggaacgcgta tcaatatatt agacacacct ggccacgccg attttggtgg tgaagttgaa      360
cgtatcatga aaatggttga cgggtgcgta ctagtggttg acgcatatga aggtacaatg      420
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tctattctta ttgaaaacat gagacgtgaa ggctttgaat tacaggtttc taaacctcaa     1260
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<210> 187

<211> 1320

<212> DNA

<213> *Bacillus subtilis*

<400> 187

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taggagatga aaaagtgaaa cttcgaaatg atcttcgcaa catcgcgatt attgcccacg      120
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acacccctgg acatgcagac tttgggggag aagtagaacg gattatgaaa atggttgacg	360
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<210> 188
 <211> 1560
 <212> DNA
 <213> Streptococcus mutans

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<210> 189

<211> 1259

<212> DNA

<213> Streptococcus pneumoniae

<400> 189

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<210> 190

<211> 1860

<212> DNA

<213> Streptococcus agalactiae

<400> 190

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<210> 191
 <211> 1500
 <212> DNA
 <213> Streptococcus pyogenes

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ttgctgtatc cagacttgct gaaagtctga aaatatttac aattgattaa aaccagtttt	180
ttaaaacatt ttgtgttata cttatctagt taaaatatat ttacttagag gaacaaatga	240
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aagagcgtgc catggattcc aatgaccttg aaaaagaacg tgggattaca atccttgcg	420
aaaatacggc agtagcctat aacgatgttc gtattaacat catggatacc ccaggacacg	480
cggacttcgg tgggtgaagtt gaacgtatca tgaaaatggg tgacgggggtt gttcttggtg	540
tggatgccta cgaaggaaca atgccccaga cgcgtttcgt attgaaaaaa gcacttgagc	600
aaaaccttat cccgatcgtt gtgggtgaaca agattgacaa accttcagct cgtccagcag	660
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aattcccagt tgtttacgca tcagctatta atggaacatc atcattatca gatgaccctg	780
ctgaccaaga gcatactatg gcaccgatct ttgatacgat tattgatcat attccagcgc	840
cagttgataa ttcagatgag cctttgcaat tccaagtgtc acttttgac tacaacgatt	900
tcgtaggtcg tatcggatc ggtcgtgttt tccgtggtac tggttaaagtg ggtgaccaag	960
taactctttc aaaacttgat ggtaccacta aaaacttccg tggtacaaaa ctgtttgggt	1020
tcttcggttt ggaacgtcgt gaaattcaag aagctaaagc aggtgacttg attgctgttt	1080
caggtatgga agatatcttt gttggagaaa ccattacacc aactgactgt gtggaagctc	1140
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cttttgcagg tcgtgaaggt aaatggatca cgtcacgtaa ggttgaagaa cgtcttttag	1260
cagaattgca aacagacgtg tcacttcgtg ttgacccaac agattcgcca gataaatgga	1320
cggtttcagg gcgtggagaa ttgcatttat ctatcctcat tgaaaccatg cgccgtgaag	1380
gctatgaact tcaagtatca cgtccagaag ttatcatcaa agaaattgat ggtgtcaa	1440
gtgaaccgtt tgagcgtgtt caaattgata caccagaaga atatcagggt gcaatcatcc	1500

<210> 192

<211> 1740

<212> DNA

<213> Enterococcus faecalis

<400> 192

catcacgcaa cggaaatcgg acaagcaagc atgggcgtgc gtattagcgg ttgtgcaggt	60
---	----

ttggaaatta ttgctatggt aaaaggcaac catcatggct atttatctaa tctaagtcct	120
---	-----

tgggattatg cagcaggctt agtacttttg gaagaatttg ggtttaaata ctctgggtatt	180
acaggaaaac cattaacttt tgcggggtcgt gaatacttta ttgcagcaac tcctgaaacc	240
tatgatgaag tatttaccgc atatttaaata gaatcggaat aatcaaagaa gagcggttgc	300
gaaaggtaag gctcttcctc ttttaaaga gaaaaatttg taaaaaatg tccttgtttt	360
cagaaaaagc cgaataattt ctaaaacttt cattatTTTT gcaggcgaaa gcctTTTTTT	420
aatgaaaaaa gtttgctata ataagcagtc ggcttttatg gacttaagta acataagcgt	480
atatagataa ggagcaatta aattgaaata cagagatgat attcgtaacg tggcaattat	540
cgccacggtt gaccatggta aaacaacctt agtagatgaa cttttaaaac aatctgacac	600
tttagatgga cacacacaat tacaagaacg tgcaatggat tccaatgcac ttgaaagtga	660
acgtggaatt actatcttag caaaaaatac agccgtagat tataacggta cacgtatcaa	720
cattctagat acaccaggac acgcggactt cgggtggtgaa gtagaacgta tcatgaaaat	780
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aattattgaa catgtgccag ctccagttga caattcagac gaaccacttc aattccaagt	1140
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ccgtgtaacg aaaatttttag gtttcttttg cttacaacgt gtggaaattg atgaagcaaa	1320
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gactttctta gttacaatt ctccatttgc gggacgtgaa ggaaaatata tcaccgctcg	1500
taaaatcgaa gaacgtttaa tggctgagtt acaaacagac gtatctttac gtgttgatcc	1560
aattggccca gattcttgga ctgtatcagg tcgtggcgaa ttgcatttat caattttaat	1620
tgaaaacatg cgtcgtgaag gctatgaatt acaagtttct cgtccagaag ttattgaacg	1680
tgaaattgat ggagttaaata gtgaaccatt tgaacgtgtt caaattgaca cacctgaaga	1740

<210> 193

<211> 1620
 <212> DNA
 <213> *Lactococcus lactis*

<400> 193
 cgaaaaagca agttaaatat gttgtaaata atggtgttac attagataat actagtgggtg 60
 ggcctaattt ggctgcacct gtgacggtgg atagtcaggt aatttcgaac gataaaggta 120
 cgattatggg tgtaaggacc tatacagcag atttaagcca agcagaagta gttaaaaaag 180
 tgggtaattt gaatgcaatg tcctttggag aattttgggg taaaaaagtt ttgctgccca 240
 gccaaaatca gacaaattca gataagactt attctgttac gtttaactg aatataaatt 300
 ggatagtatc taatggctat gcttcgctaa caaaagtaac aggtggctat ggttcttgca 360
 ttgaccatgt ttatgttgct aattctagtgt ttactactgc aacgaatggt cagattaaag 420
 gttcaagtgg ttataactca caagttgatg acaaatcaga agggaatagt ttatcgtggt 480
 caattacgcg aaactataaa cctgtaaaag ttccagcaag tggggcaaat gtaggagcta 540
 cgtattttgc cacacttaaa cggggaaata gtacatggaa attccaaaca acaaatagag 600
 cttattaagt gggaggaagt ggaatgaata taaaaggcat aaaaatttgg caagtatttc 660
 ttgcattcat catttgata ggaaccatgt ttcttcctgc aacggtaaatt caggctaaat 720
 tgaatacgaa ttttgactat aaaaaaagtc gagaaaattt cttttatttt ctttttcac 780
 aagtcccttt ttatagtttc attttgggat tgggtgttgc tatatcactt tttctcattt 840
 ataggaaaat aaattttagt gtctattttt cttttgctag tcttattttt tacattagtt 900
 tcttagttat agcttttccg tctatgatta tttttaatca tagtttatct gggaatactt 960
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 aacaacataa tcattttttac tgattttatt aattataaaa aaataaagaa ctccttagaa 1140
 atttttcttt ggggttttca ttttggaagt aaaaaaatct ttgttaggct tgtaaacgtg 1200
 tgcatttaca gcttttagaa aagtgtgcta taatgggtta gatatatacg aaagtaagggt 1260
 atgataaaat tgactaaatt acgcgaagat attagaaacg tcgctgttat tgcccacgtt 1320
 gaccatggta aaactacatt gggtgacgaa ctcttaaaac aatctcaaac gttggatgct 1380
 cgtaaagaat tagctgaacg tgcgatggac tcaaatgcac ttgagcaaga acgtgggatt 1440
 actatccttg ccaaaaatac agcagttgaa tataacggaa ctcgatatcaa catcttgac 1500
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gttgtcctcg ttgtcgatgc ttatgaagga acaatgcctc aaacacgttt tgttttgaaa 1620

<210> 194
 <211> 468
 <212> DNA
 <213> Neisseria meningitidis groupe B

<220>
 <221> misc_feature
 <222> (4)..(5)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (11)..(11)
 <223> n is a, c, g, or t

<400> 194
 tttnnngcgg ntgttaccta catcgagccg attatgtggc agacggtgga gaagattatc 60
 gccaaagagc ggcccgatgc gattctgccc acgatgggcg gccagaccgc gctgaactgt 120
 gcgctggatt tggcgcgcaa cggcgtgctg gcgaaataca acgtcgagtt aatcggcgcg 180
 acagaagacg cgattgacaa ggcggaagac cgtggccgct ttaaagaagc gatggaaaaa 240
 atcggtttgt cttgcccga atcttttgtc tgccacacga tgaacgaagc cttggcggcg 300
 caagaacagg tcggcttccc gacgctgatt cgtcgctctt tcacgatggg cggttcgggc 360
 ggcggcattg cctacaataa agacgagttt ttggcgattt gcgaacgcgg tttcgatgcg 420
 tcgcccacgc acgagctgct gattgagcag tccgtcctcg gctggaaa 468

<210> 195
 <211> 459
 <212> DNA
 <213> Neisseria meningitidis groupe C

<400> 195
 gttacctaca tcgagccaat tatgtggcag acggtggaga agattatcgc caaggagcgt 60
 cctgatgcga ttctgcccac gatgggcggt cagaccgcgc tgaactgtgc gctggatttg 120
 gcgcgcaacg gcgtgctggc gaaatacaat gtcgagctga tcggcgcgac ggaagacgcg 180
 attgacaagg cggaagaccg cggtcgtttt aaagaagcga tggaaaaaat cggcctctcc 240
 tgcccgaat cttttgtctg ccacacgatg aacgaagctt tggcagcgca agaacaggtc 300
 ggcttccta cctgatctcg tccgtctttc acgatgggcg gttcgggcgg cggcattgcc 360
 tacaataaag atgagttttt ggcgatttgc gaacgcggtt tcgatgcgtc gcctacgcac 420

gagctgctga ttgagcagtc tgttcctcgg ctggaaaga 459

<210> 196
 <211> 458
 <212> DNA
 <213> Enterobacter cloaceae

<400> 196
 gcaacctaca tcgagccaat tcaactgggaa gtggtacgta aaatcatcga gaaagagcgt 60
 ccggatgcgg ttctgccgac catgggtggc cagactgcgc tgaactgtgc gctggagctg 120
 gagcgtcagg gcgtgctgga agagttcggc gtgaccatga ttggtgcgac cgccgacgcg 180
 attgataaag cagaagaccg tcgtcgcttc gacgtggcga tgaaaaaat cggcctcgac 240
 accgcgcgtt ccggtatcgc tcacaacatg gaagaggcgc tggccggtgc ggctgaagtg 300
 gggttatccgt gcatcatccg tccttccttc accatgggcg gcaccggcgg cggtatcgcc 360
 tacaaccgcg aagagtttga agagatttgc gagcgcggcc tggatctctc cccaacaaaa 420
 gagctgctga ttgatgaatc gctgattggc tggaaaga 458

<210> 197
 <211> 453
 <212> DNA
 <213> Klebsiella pneumoniae

<400> 197
 ctacatcgag ccgattcact gggaagtggc gcgtaaaatc atcgaaaaag agcgcccgga 60
 tgcggtgctg ccgaccatgg gcggccagac ggcgctgaac tgcgcgctcg agctggagcg 120
 tcaggggggtc ctggctgaat tcggcgtgac catgattggc gccaccgccg atgcgattga 180
 taaagccgaa gaccgtcgcc gtttcgatat cgcaatgaaa aaaatcggcc tcgacaccgc 240
 gcgctctggc atcgcccaca cgatggaaga ggcgctggcg gttgccgccg acgttggttt 300
 cccgtgcate atccgtccgt ccttcacat gggcggcacc ggcggcggtg tcgcctataa 360
 ccgcgaagag ttcgaagaaa tctgcgaacg cggcctggat ctctctccga ccaacgaact 420
 gctgatcgat gaatcgctga tcggctggaa aga. 453

<210> 198
 <211> 458
 <212> DNA
 <213> Shigella sonnei

<400> 198
 gcgacctaca tcgagccgat tcaactgggaa gtagtacgca agattattga aaaagagcgc 60

ccggacgcgg tgctgccaac gatgggcggt cagacggcgc tgaactgcgc gctggagctg 120
gagcgtcagg gcgtgttgga agagttcggc gtgactatga ttggtgcgac cgccgatgcg 180
attgataaag cagaagaccg ccgtcggttc gacgtagcga tgaagaaaat tggctctggaa 240
accgcgcgtt ccggtatcgc acacacgatg gaagaagcgc tggcggttgc cgctgacgtg 300
ggcttcccggt gcattattcg cccatccttt accatgggcg gtagcggcgg cggtatcgct 360
tataaccgcg aagagtttga agaaatttgc gcccgcggtc tggatctctc cccaacaaaa 420
gagctgctga ttgatgagtc gctgatcggc tggaaaga 458

<210> 199
<211> 458
<212> DNA
<213> Escherichia coli

<400> 199
gcaacctaca tcgagccgat tcaactggaa gttgtacgca agattattga aaaagagcgc 60
ccggacgcgg tgctgccaac gatgggcggt cagacggcgc tgaactgcgc gctggagctg 120
gaacgtcagg gcgtgttgga agagttcggt gtcaccatga ttggtgccac tgccgatgcg 180
attgataaag cagaagaccg ccgtcggttc gacgtagcga tgaagaaaat tggctctggaa 240
accgcgcgtt ccggtatcgc acacacgatg gaagaagcgc tggcggttgc cgctgacgtg 300
ggcttcccggt gcattattcg cccatccttt accatgggcg gtagcggcgg cggtatcgct 360
tataaccgtg aagagtttga agaaatttgc gcccgcggtc tggatctctc tccgacaaaa 420
gagttgctga ttgatgagtc gctgatcggc tggaaaga 458

<210> 200
<211> 453
<212> DNA
<213> Pseudomonas aeruginosa

<400> 200
ctacatcgag ccgatcaagt gggccaccgt ggccaagatc atcgagaagg aacgccccga 60
cgcgctgctg ccgaccatgg gcggccagac cgcgctgaac tgcgccctgg acctggagcg 120
ccacggcgtg ctggagaagt tcggcgtgga gatgatcggc gccaatgccg ataccatcga 180
caaggccgag gaccgctcgc gcttcgacaa ggcgatgaag gatatcggcc tggcctgtcc 240
gcgctcgggc atcgcccaca gcatggagga ggcctacggc gtgctcgagc aggtcggctt 300
cccctgcata atccgtccgt ccttcacat gggcggcacc ggcggcggtc tcgcctacaa 360
ccgtgaagag ttogaagaga tctgcgcccc tggcctcgac ctgtcgccga ccaacgagct 420

gttgatcgac gagtcgctga tcggctggaa aga 453

<210> 201
 <211> 458
 <212> DNA
 <213> Escherichia coli

<400> 201
 gcgacctaca tcgagccgat tcactgggaa gtggtacgta agattattga aaaagagcgc 60
 ccggacgcgg tgctgccaac catgggcggg cagacggcgc tgaactgcgc gctggagctg 120
 gaacgtcagg gcgtgttgga agagttcggc gtcacatga ttggtgccac tgccgatgcg 180
 attgataaag cagaagaccg ccgtcgtttc gacgtagcga tgaagaaaat tggctctggaa 240
 accgcgcggt ccggtatcgc acatacgatg gaagaagcgc tggcgggttc cgctgacgtg 300
 ggcttcccggt gcattattcg cccatccttt accatgggcg gtagcggcgg cggtatcgct 360
 tataaccgcg aagagtttga agaaatttgc gcccgcggtc tggatctctc tccgaccaaa 420
 gagttgctga ttgatgagtc gctgatcggc tggaaaga 458

<210> 202
 <211> 454
 <212> DNA
 <213> Salmonella typhimurium

<400> 202
 cctacatcga gccgattcac tgggaagtgg tgcgcaaaat cattgaaaaa gagcgtccgg 60
 atgcggtgct gccgaccatg ggcggccaga ccgcgctgaa ctgcgcgctg gagctggagc 120
 ggcagggcgt gctggaagag ttcggcgtca ccatgattgg tgcgaccgcc gacgccattg 180
 ataaagccga agaccgtcgt cgcttcgata tcgcgatgaa gaaaattggg ctgcacaccg 240
 cgcgttccgg tatcgcgcac actatggaag aagcgtggc ggttgccgct gacgtgggct 300
 tcccgatcat catccggcct agctttacca tgggcggcac cggcggcggg atcgcttaca 360
 accgtgaaga gttcgaagaa atctgcgaac gcggtctgga cctctcgcca accaacgagc 420
 tgctgattga tgaatcgctg atcggctgga aaga 454

<210> 203
 <211> 461
 <212> DNA
 <213> Salmonella enterica hadar

<220>

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<221> misc_feature
<222> (7)..(7)
<223> n is a, c, g, or t

<400> 203
tgatgcncct acatcgagcc gattcactgg gaagtggtag gcaaaatcat cgaaaaagag      60
cgtccggatg cgggtgctgcc gaccatgggc ggccagacgg cgctgaactg cgcgctggag      120
ctggagcggc agggcgtgct ggaagagttc .ggcgtcacca tgattggcgc caccgccgac      180
gccattgata aagccgaaga ccgtcgtcgc ttcgatatcg cgatgaagaa aattggtctc      240
gacaccgcgc gttccggtat cgcgcacact atggaagaag cgctggcggg tgccgctgac      300
gtgggcttcc cgtgcatcat ccgtccgtcc tttaccatgg gcggcaccgg cggcggtatc      360
gcttacaacc gtgaagagtt cgaagaaatc tgcaacgcg gtctggacct ctgcccaacc      420
aacgagctgc tgattgatga atcgctgacg ggctggaaag a                        461

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<210> 204
<211> 464
<212> DNA
<213> Salmonella enteritidis

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<400> 204
ggctgatgcc cctacatcga gccgattcac tgggaagtgg tacgcaaat catcgaaaaa      60
gagcgtccgg atgcggtgct gccgaccatg ggcgccaga cggcgctgaa ctgcgcgctg      120
gagctggagc ggcagggcgt gctggaagag ttcggcgtca ccatgattgg cgccaccgcc      180
gacgccattg ataaagccga agaccgtcgt cgcttcgata tcgcgatgaa gaaaattggt      240
ctcgacaccg cgcgttccgg tatcgcgcac actatggaag aagcgtggc ggttgccgct      300
gacgtgggct tccggtgcat catccgtccg tcctttacca tgggcggcac cggcggcggt      360
atcgcttaca accgtgaaga gttcgaagaa atctgcgaac gcggtctgga cctctcgcca      420
accaacgagc tgctgattga tgaatcgctg atcggtgga aaga                        464

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<210> 205
<211> 452
<212> DNA
<213> Salmonella enterica Brandenburg

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<400> 205
tacatcgagc cgattcactg ggaagtgggt cgcaaatca ttgaaaaaga gcgtccggat      60
gcggtgctgc cgaccatggg cggccagacg gcgctgaact gcgcgctgga gctggagcgg      120
cagggcgtgc tcgaagagtt cggcgtcacc atgattggcg ccaccgccga cgccattgat      180

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aaagccgaag accgtcgtcg cttcgatatc gcgatgaaga aaattggtct cgacaccgcg 240
 cgttccggta tcgcgcacac tatggaagaa gcgctggcgg ttgccgctga tgtgggcttc 300
 ccgtgcatca tccgtccgtc ctttaccatg ggcggcaccg gtggcggtat cgcttacaac 360
 cgtgaagagt tcgaagaaat ctgcgaacgc ggtctggacc tctcgccaac caacgagctg 420
 ctgattgatg aatcgctgat cggctggaaa ga 452

<210> 206
 <211> 453
 <212> DNA
 <213> Salmonella enterica derby

<400> 206
 ctacatcgag ccgattcact gggaagtggg gcgcaaaatc atcgaaaaag agcgtccgga 60
 tgcggtgctg ccgaccatgg gcggccagac cgcgctgaac tgcgcgctgg agctggagcg 120
 gcagggcggtg ctggaagagt tcggcgtcac catgattggc gccaccgccg acgccattga 180
 taaagccgaa gaccgtcgtc gcttcgatat cgcgatgaag aaaatcggtc tcgacaccgc 240
 gcgttccggg atcgcgcaca ctatggaaga agcgtggcgg gttgccgctg acgtgggctt 300
 cccgtgcatc atccgtccgt cctttaccat gggcggcacc ggcggcggta tcgcttacia 360
 ccgtgaagag ttcgaagaaa tctgcgaacg cggctctggac ctctcgccaa ccaacgagct 420
 gctgattgat gaatcgctga tcggctggaa aga 453

<210> 207
 <211> 453
 <212> DNA
 <213> Salmonella enterica virchow

<400> 207
 ctacatcgag ccgattcact gggaagtggg gcgcaaaatc attgaaaaag agcgtccgga 60
 tgcagtgctg ccgaccatgg gcggccagac ggcgctgaac tgtgcgctgg agctggagcg 120
 gcagggcggtg ctggaagagt tcggcgtcac catgattggc gccaccgccg acgccattga 180
 taaagccgaa gaccgtcgtc gcttcgatat cgcgatgaag aaaattggtc tcgacaccgc 240
 gcgttccggg atcgcgcaca ctatggaaga agcgtggcgg gttgccgctg acgtgggctt 300
 cccgtgcatc atccgtccgt cctttaccat gggcggcacc ggcggcggta tcgcttacia 360
 ccgtgaagag ttcgaagaaa tctgcgaacg cggctctggac ctctcgccaa ccaacgagct 420
 gctgattgat gaatcgctga tcggctggaa aga 453

<210> 208
 <211> 453
 <212> DNA
 <213> *Salmonella paratyphi B*

<400> 208
 ctacatcgag ccgattcact ggggaagtggg gcgcaaaatc attgaaaaag agcgtccgga 60
 tgcagtgctg ccgaccatgg gcggccagac cgcgctgaac tgcgcgctgg agctggagcg 120
 gcagggcggtg ctgaagagt tcggcgtcac catgattggc gccaccgccg acgccattga 180
 taaagccgaa gaccgtcgtc gcttcgatat cgcgatgaag aaaattgggtc tcgacaccgc 240
 gcgttcgggt atcgcgaca ctatggaaga agcgtggcg gttgccgctg acgtgggctt 300
 cccgtgcac atccggccta gctttaccat gggcggcacc ggcggcggtg tcgcttacia 360
 ccgtgaagag ttcgaagaaa tctgcgaacg cggctctggac ctctcgccaa ccaacgagct 420
 gctgattgat gaatcgctga tcggctggaa aga 453

<210> 209
 <211> 503
 <212> DNA
 <213> *Proteus vulgaris*

<400> 209
 cgacagtcac gaccgaccct gaaatggcgg atgccaccta catcgagcct attcattggc 60
 aagtcgtcag aaaaattatt gaaaaagagc gccctgatgc gattttgcc acaatggggg 120
 ggcaaacggc attaaattgc gcattagaat tagaacgtca aggtgtgtta gctgaattcg 180
 gtgtgaccat gattggtgct acggctgatg ctatcgataa agcagaagat agacaacgct 240
 ttgataaagc aatgaaaaaa atcggcttag gcacagctcg ctcagggtatt gctcataatc 300
 tagaagaagc ttttgccgtc gctgaagatg tcggattccc ttgcatcatt cgtccttcat 360
 ttactatggg cggcacgggg ggcgggtatcg cttataaccg tgaagaattt gaagaaattt 420
 gtactcgtgg attagattta tcaccgacta acgagttatt gattgatgaa tcacttattg 480
 gttggaaaga gtacgagatg gaa 503

<210> 210
 <211> 503
 <212> DNA
 <213> *Enterobacter aerogenes*

<400> 210
 cgacactcat gaccgaccgg gaaatggccg atgcgaccta tatcgagccg attcactggg 60
 aagtgggtgcg taaaattatc gaaaaagagc gtccggacgc ggtgctgccg accatggggc 120

gccagaccgc gctgaactgc gcgctggagc tggagcgtca gggcgtgctg gcagagttcg 180
gcgtgaccat gattggtgcg accgccgatg cgatcgataa agcgggaagac cgccgtcgct 240
tcgacgtggc gatgaagaaa atcggctctg acaccgcgcg ttccggcatt gcgcacacca 300
tggaagaagc gctggcggtg gccgctgaag ttggcttccc atgcatcatc cgtccgtcct 360
ttactatggg cggcaccggc ggcggtatcg cctataaccg cgaagagttc gaagaaatct 420
gcgaacgcgg cctggatctc tctccgacca acgaactgct gattgatgaa tcgctgatcg 480
gctggaagga atacgaaatg gaa 503

<210> 211
<211> 453
<212> DNA
<213> Burkholderia cepacia

<400> 211
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aggatgtggt tcacgagttc gtacaagcgt atcgacttcc agcgcccatt gaacaggtga 180
gcgcgtggct tttccgtgcc gcgcgcaacc gaatcgtcga ccgttttcgc aagaagaagg 240
agcagccgct ggccgacctg tcggaggtcg acgatgacgc gaacagcgag tatcgctcgc 300
acctcgcgct accggcgcat gatgccggcc ccgaagcact ctacgctcgc acgctcgtgc 360
tcaaggcctt gcaggatgcg ctcgacgagt tgccgacgaa tcagcgtgac gtctttatcg 420
cacacgagct ggagggtcag tcataaatgt cga 453

<210> 212
<211> 616
<212> DNA
<213> Burkholderia mallei

<400> 212
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gaccgatccg aacacggcgg acgtcacgta catcgagccg atcacgtggg aagtcgtcga 120
gcgcatcatc gcgaaggagc gccccgacgc gatcctgccg acgatgggag gccagaccgc 180
gctgaactgc gcgctcgacc tgttccacca cggcgtgctc gagaagtacg gcgtcgagct 240
gatcggcgcg tcgccggagg cgatcgacaa ggccgaagac cgccagaagt tcaaggacgc 300
gatgacgaag atcggcctcg gctcggcgaa gtccggcatc gcgcactcga tggaagaggc 360

gctgaagggtg cacgcggaca tcgcggcggc gacgggcggc agcggctacc cggtcgtgat	420
ccgcccgtcg ttcacgctcg gcggctcggg cggcggcatc gcgtacaacc gcgaggagtt	480
cgaggagatc tgcaagcgcg gcctcgatct gtcgccgacg cgcgagctgc tgatcgagga	540
atcgctgctc ggctggaagg agtacgagat ggaggtcgtg cgcgatcgcg ccgacaactg	600
catcatcgtc tgctcg	616

<210> 213
 <211> 616
 <212> DNA
 <213> Burkholderia pseudomallei

<400> 213	
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gaccgatccg aacacggcgg acgtcacgta catcgagccg atcacgtggg aagtcgtcga	120
gcgcatactc gcgaaggagc gcccgcacgc gatcctgccg acgatgggag gccaaaccgc	180
gctgaactgc gcgctcgacc tggtccacca cggcgtgctc gagaagtacg gcgctcgagct	240
gatcggcgcg tcgccggagg cgatcgacaa ggccgaagac cgccagaagt tcaaggacgc	300
gatgacgaag atcggcctcg gctcggcgaa gtccggcatc gcgcactcga tggaagaggc	360
gctgaagggtg cacgcggaca tcgcggcggc gacgggcggc agcggctacc cggtcgtgat	420
ccgcccgtcg ttcacgctcg gcggctcggg cggcggcatc gcgtacaacc gcgaggagtt	480
cgaggagatc tgcaagcgcg gcctcgatct gtcgccgacg cgcgagctgc tgatcgagga	540
atcgctgctc ggctggaagg agtacgagat ggaggtcgtg cgcgatcgcg ccgacaactg	600
catcatcgtc tgctcg	616

<210> 214
 <211> 502
 <212> DNA
 <213> Legionella pneumophila

<400> 214	
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gacaaacagc cttaaactgc gccttggaact tggttaagaga aggggtatta gccaaagtact	180
ctgttgaaat gataggagcg acgcgtgaag ccatagacag ggccgaagat agagaaaaat	240
ttcgccagct gatgattaaa atcggattgg atatgccaag gtcgacgatt gctcatagcc	300
tggaagaagc aattcaagta caagcccgtt taggctttcc tgccatcatc aggccttcat	360

ttaccatggg tggtagtgga ggcggtattg cctataatcg tgaagaattt gaagaaattt	420
gcattagagg attggagttg tcgccaactc acgagctttt gattgatgaa tcggttctgg	480
gttggaaaga atatgaaatg ga	502

<210> 215
 <211> 502
 <212> DNA
 <213> *Citrobacter freundii*

<400> 215	
cgacacttat gactgatccg gaaatggccg atgccaccta catcgagccg attcactggg	60
aagtgggtacg caaaatcatt gagaaagagc gcccggatgc ggtgctgcca accatgggcg	120
gtcagacggc gctgaactgt gcgctggagc tggaaacgcca gggcgtactg gctgaattcg	180
gcgtgaccat gattggcgca acggcggatg ccattgataa agcgggaagac cgtcgtcgct	240
ttgatatcgc gatgaagaaa attgggtctcg acaccgcgcg ctctggcatc gtcacacca	300
tggagaagc gctggcggtt gctgctgacg tgggcttccc gtgcatcatc cgaccgagct	360
tcaccatggg cggcaccggc ggcggtatcg cttataaccg tgaagagttc gaagagattt	420
gtgaacgcgg tctggacctt tccccaacca acgagctgct gattgatgaa tcgctgattg	480
gctggaaaga gtacgaaatg ga	502

<210> 216
 <211> 503
 <212> DNA
 <213> *Acinetobacter baumanii*

<400> 216	
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gagaggtcga aaccacgttc acaaattctt aggaattctt cgcggttata tgcaatacca	120
ccgcctgaac caccatagt gaatgacgga cggataatta ctgggaaacc aaagcgagat	180
tgaatttcca atgcttcttc cattgtttca gcaatggcag cttttggaca ttccaagccg	240
attttgcgca ttgcttcac aaacaattta cggctctcag ctttttcaat tgcttctttt	300
gttgcaccaa taagtcttac gccgtatfff tctaatacac cattttcatc aagtgcaagt	360
gcgcagttaa gagcagtttg tccaccata gtagggagta ctgcatctgg gcgctctttt	420
tcaatgattt gagcaacagt ttgccaagta attggctcaa tataagttgc atcagccatt	480
gaagggtcag tcataagtgt cga	503

<210> 217
 <211> 503
 <212> DNA
 <213> *Serratia marcescens*

<400> 217
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 aagtgggtgcg caagatcatc gaaaaagagc gcccggatgc ggtgctgccg accatgggcg 120
 gccagacggc gctgaactgc gcgctggagc tggagcgcca gggcgtgctg gccgagttcg 180
 gcgttaccat gatcggcgcc accgccgatg cgattgacaa ggccgaagac cgtcgccgct 240
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 tggaagaagc gctggcggtg gccgctgacg tcggcttccc gtgcatcatc cgcccttcc 360
 ttaccatggg cggcaccggc ggcggcatcg cctacaaccg cgaagagttc gaagagatct 420
 gcgaacgcgg tctggacctg tcgccgacca acgagctgct gatcgatgaa tcgctgatcg 480
 gttggaaaga atacgagatg gaa 503

<210> 218
 <211> 610
 <212> DNA
 <213> *Pseudomonas putida*

<400> 218
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 aagcatcctg attctcggtg ccggcccgat cgtgatcggc caggcctgtg aattcgacta 120
 ctccggcgcc caggcctgca aggccctgcg cgaggaaggt ttccgcgtca tcctggtgaa 180
 ctccaaccca gccaccatca tgaccgaccc ggccatggcc gacgccacct acatcgagcc 240
 gatcaagtgg cagtcggtgg ccaagatcat cgagaaagag cgcccggacg ccgttttgcc 300
 gaccatgggt ggccagaccg ccctgaactg cgccctggac ctggagcgcc acggcgttct 360
 ggagaagttt ggcgtagaga tgatcgggtg caacgccgat accatcgaca aggctgaaga 420
 ccgctcgcgc ttcgacaagg ccatgaaaga catcggcctg gaatgcccg cgtcgggtat 480
 cgcccacagc atggaagagg ccaatgcggt cctcgaaaag ctcggttcc cgtgcatcat 540
 tcgcccgtcg ttcaccatgg ggtggcaccg gcggtggtat cgcttacaac cgtgaagaat 600
 tcgaagaaat 610

<210> 219
 <211> 466

<212> DNA
 <213> *Morganella morganii*

<400> 219
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 gacagcagat gcgattgata aagccgaaga tcgccgccgt ttcgatatcg cgatgaaaaa 180
 aatcgggtctg gatacagcgc gttccggtat cgcacacacc atggaagaag cgtttgcggt 240
 cgccgatgat gtcggtttcc cgtgcattat ccgcccgta ttcacatgg gcggcaccgg 300
 cggcgggtatt gcgtataacc gtgaagaatt cgaggaaatc tgtaccgcgc gcctggatct 360
 ctccctgacc aacgaactgc tgattgatga atcactgatt ggctggaaag agtacgaaat 420
 ggaaagggcg aattccagca cactggcggc cgttactagt ggatca 466

<210> 220
 <211> 503
 <212> DNA
 <213> *Klebsiella oxytoca*

<400> 220
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 aagtgggtgcg caagatcatt gagaaagagc gtccggatgc ggttctgccg accatgggcg 120
 gccagacggc gctgaactgc gcgctggagc tggagcgtca gggcgtgctg gccgagttcg 180
 gcgtgaccat gattggcgcg accgccgacg cgattgataa agccgaagac cgccgccgtt 240
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 tggaagaagc gctggcgggt gccgctgaag ttggcttccc gtgcatcatc cgtccgtcct 360
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 gcgaacgcgcg tctggatctc tcgccgacca acgagctgct gattgatgaa tcgctgatcg 480
 gctggaaaga atacgaaatg gaa 503

<210> 221
 <211> 502
 <212> DNA
 <213> *Moraxella catarrhalis*

<220>
 <221> misc_feature
 <222> (481)..(481)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (493)..(493)
 <223> n is a, c, g, or t

<400> 221
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 acaaacggca cttaactgtg cgcttgacct tgacaaacat ggcgtgcttg ccaaatatgg 180
 ctgtgagctg attggggcga ccaaagaagc cattgaaaaa gccgaagacc gtgaactggt 240
 tgataaagcc atgaaaaaaaa tcggtctgga atgccccaaa gcagaaattg cacagagcat 300
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 caccatgggg ggttctgggg gtggcattgc ttataaccgt gaggagttaa ttgagatttg 420
 tgagcgtggg ttgacttat caccacacca ccagctgctc attgatgaga gtttaatcgg 480
 ntggaaagag tangaaatgg aa 502

<210> 222
 <211> 624
 <212> DNA
 <213> Brucella melitensis biovar 1

<400> 222
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 atgatcgcg gcaggccaac cacgtcgagc gcctgtgctg cctttgcaag cgcattggctc 180
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 gccagatcgg gatcagtata aaat 624

<210> 223
 <211> 618
 <212> DNA

<213> Brucella melitensis biovar 2

<400> 223

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gatgatcgcg ggcaggccaa ccacgtcgag cgcctgtgct gcctttgcaa gcgcatggct      180
catatagcgc tgcttgcgct ccacttcgcc gagctgccat tcggtttcaa gcttgtcgag      240
cgccttgtcc agttcgtcgc cggagaattg cgccttcacc tccgcgcgct tgacctcgtg      300
gcgcttgcgg tcctcatcct tgatttcagt cgcattggcg aacatcgagc ccggcgtgtc      360
gaggccgatc ttcttcatgg cttcgcggaa gagcgcgcgg tcttcggcct tgtcgatagc      420
ttcggccttg gcgccgatca tctcgacggt ataacgttca agcacgcccc tgcggcgcaa      480
ggaaagcgcg gtgttgagcg cggctctgtcc gcccatcgtc ggcaggatcg cgtccggggcg      540
ctccttggcg atgatcttgg cgacgacttc cggcgtgatc ggctcgatat aggttgcac      600
cgccagatcg ggatcagt                                     618
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<210> 224

<211> 617

<212> DNA

<213> Brucella abortus biovar 1

<400> 224

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gaattcctga cggttatagg caatgccgcc gccggtgccg ccgagcgtga aggaggggcg      120
gatgatcgcg ggcaggccaa ccacgtcgag cgcctgtgct gcctttgcaa gcgcatggct      180
catatagcgc tgcttgcgct ccacttcgcc gagctgccat tcggtttcaa gcttgtcgag      240
cgccttgtcc agttcgtcgc cggagaattg cgccttcacc tccgcgcgct tgacctcttg      300
gcgcttgcgg tcctcatcct tgatttcagt cgcattggcg aacatcgagc ccggcgtgtc      360
gaggccgatc ttcttcatgg cttcgcggaa gagcgcgcgg tcttcggcct tgtcgatagc      420
ttcggccttg gcgccgatca tctcgacggt ataacgttca agcacgcccc tgcggcgcaa      480
ggaaagcgcg gtgttgagcg cggctctgtcc gcccatcgtc ggcaggatcg cgtccggggcg      540
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cgccagatcg ggatcag                                     617
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<210> 225

<211> 633

<212> DNA
 <213> Brucella abortus biovar 2

<400> 225
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 gggcggatga tcgcgggcag gcccaaccacg tcgagcgcct gtgctgcctt tgcaagcgca 180
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 gtgtcgaggc cgatcttctt catggcttcg cggaagagcg cgcggtcttc ggcttgctcg 420
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 gcatccgccca gatcgggatc agtataaatt agt 633

<210> 226
 <211> 632
 <212> DNA
 <213> Brucella suis biovar 1

<220>
 <221> misc_feature
 <222> (6)..(6)
 <223> n is a, c, g, or t

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gtccggggcgc tccttggcga tgatcttggc gacgacttcc ggcgtgatcg gctcgatata 600
 ggttgcatcc gccagatcgg gatcagtata aa 632

<210> 227
 <211> 635
 <212> DNA
 <213> *Brucella suis* biovar 3

<400> 227
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 aggggcggat gatcgcgggc aggccaacca cgtcgagcgc ctgcgctgcc tttgcaagcg 180
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 ccgggcgctc cttggcgatg atcttggcga cgacttcggc cgtgatcggc tcgatatagg 600
 ttgcatccgc cagatcggga tcagtataaa ttagt 635

<210> 228
 <211> 624
 <212> DNA
 <213> *Brucella canis*

<400> 228
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gccagatcgg gatcagtata aaaa 624

<210> 229
<211> 632
<212> DNA
<213> *Brucella ovis*

<400> 229
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ctcgaagaat tcctgacggt tataggcaat gccgccgcgc gtgccgccga gcgtgaagga 120
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<210> 230
<211> 482
<212> DNA
<213> *Francisella tularensis*

<220>
<221> misc_feature
<222> (3)..(3)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (22)..(22)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (480)..(480)
<223> n is a, c, g, or t

<400> 230

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tttaacaaag ccatggcaaa aattggctta gaggttccta gaaatgttgt agtgcaatcg      300
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at                                                                           482

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<210> 231
<211> 480
<212> DNA
<213> Francisella tularensis

```

```

<220>
<221> misc_feature
<222> (6)..(6)
<223> n is a, c, g, or t

```

```

<220>
<221> misc_feature
<222> (469)..(469)
<223> n is a, c, g, or t

```

```

<220>
<221> misc_feature
<222> (472)..(472)
<223> n is a, c, g, or t

```

```

<220>
<221> misc_feature
<222> (476)..(476)
<223> n is a, c, g, or t

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```

<220>
<221> misc_feature
<222> (479)..(479)
<223> n is a, c, g, or t

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<400> 231
acgaantaga ctgatccaac aaccgcagat aaaatcttta tcgagccaat tacggttgag      60
agtgttggtg aaattatcgc tagagaaaga ccagatgcaa tcttacctac agtaggtgga      120
caaactgcgc ttaactgtgc tttagcatta gacaaagctg gtattttaga aaaatataat      180

```

gtcgaaatgc ttggtgcaaa agctgactct attgataagg cagaaaatag agaaaaatTT 240
aacaagcca tggcaaaaat tggcttagag gttcctagaa atgttgtagt gcaatcgatg 300
gagcaagctt ataaagctct agaagatata ggactaccgg ctattatcag accatcattt 360
acacttggtg gtagcgggtg tggatatcgt tatacaaaaag aagagtttga aaaaattgtc 420
aaaaatggtc taagcctata accaacaat gaagtactaa tagatgagnc ancctnaanc 480

<210> 232
<211> 503
<212> DNA
<213> *Acinetobacter calcoaceticus*

<400> 232
cgacagttat gactgacct tcaatggctg atgcaactta tattgagccg attacttggc 60
aaacagttgc acagattatt gaaaaagaac gtccagatgc agtattgcca actatgggtg 120
gtcaaactgc attgaactgt gccctcgac ttgatgagca cggcgttctt gctaaatata 180
atgttgaatt aattggtgca agcaaagaag cgattgagaa agccgaagat cgtaaactct 240
tcgatatcgc tatgcgcaaa attggcttgg aatgtccaaa agctgccatt gctgaaacaa 300
tggaagaagc ttttaacaatc cagtcgcgct ttggttttcc tgtaattatt cgtccatcat 360
ttacaatggg tggttcgggc ggtggcattg catataaccg cgaagaattc cttgaaatTT 420
gtgaacgtgg ttttgacctc tctcctactc accagttatt gatcgatgaa tctttaattg 480
gctggaaaga atacgagatg gaa 503

<210> 233
<211> 617
<212> DNA
<213> *Mycobacterium tuberculosis*

<400> 233
ggtgctgcgc gccgagggt tgcaggtcag cctggtgaac tctaaccgg ccaccatcat 60
gaccgaccgg gagttcgccg accacaccta cgtagagccc atcaccggcg cgttcgtgga 120
gcgggttatc gcccaacagg ccgagcgggg caacaagatc gacgccctgc tggcgaccct 180
gggtgggcag accgcgctga acaccgcggt cgcgctgtac gagagcgggg tgctggaaaa 240
gtacggcgtg gaactcatcg gcgccgattt cgacgccatc cagcgcggcg aggaccggca 300
gcggttcaag gacatcgctg ccaaggccgg tggcgaatcc gcccgagcc gagtgtgttt 360
caccatggcc gaagtgcgtg agacggtcgc cgagctcggc ctgccggtgg tggcgcgcc 420
gagcttcacc atgggcgggc tgggttcggg gatagcgtac tccaccgacg aggtcgaccg 480

gatggccggc gccgggctgg cggcctcgcc cagcgccaac gtgctcatcg aggaatcgat 540
 ttacggctgg aaggaattcg aactcgagct gatgcgcgac ggccacgaca atgtggtggt 600
 ggtgtgctcg atcgaaa 617

<210> 234
 <211> 617
 <212> DNA
 <213> *Mycobacterium bovis* subspecies *bovis*

<400> 234
 ggtgtgctgc gccgagggct tgcaggtcag cctggtgaac tctaattccg ccaaccatcat 60
 gaccgacccg gagttcgccg accacaccta cgtagagccc atcaccgccg cgttcgtgga 120
 gcgggttata gcccaacagg ccgagcgggg caacaagatc gacgccctgc tggcgaccct 180
 ggggtgggcag accgcgctga acaccgcggt cgcgctgtac gagagcgggg tgctggaaaa 240
 gtacggcgtg gaactcatcg gcgccgattt cgacgccatc cagcgcggcg aggaccggca 300
 gcggttcaag gacatcgctg ccaaggccgg tggcgaatcc gcccgagcc gagtgtgttt 360
 caccatggcc gaagtgcgtg agacggctgc cgagctcggc ctgccggtgg tgggtgcggcc 420
 gagcttcacc atgggcgggc tgggttcggg gatagcgtac tccaccgacg aggtcgaccg 480
 gatggccggc gccgggctgg cggcctcgcc cagcgccaac gtgctcatcg aggaatcgat 540
 ttacggctgg aaggaattcg aactcgagct gatgcgcgac ggccacgaca acgtggtggt 600
 ggtgtgctcg atcgaaa 617

<210> 235
 <211> 615
 <212> DNA
 <213> *Mycobacterium avium* subspecies *paratuberculosis*

<400> 235
 ggtgtcgaag gccgagggcc tgcaggtcag cctggtcaac tccaaccgg ccaccatcat 60
 gaccgatccg gagtacccg accacaccta cgtcgagccc atcacgccg ccttcgtcga 120
 acgggtgatc gcgcagcagg ccgagcgggg caacaagatc gacgcgctgc tggccaccct 180
 gggcgggcag accgcgctga acaccgccgt cgcgctgtac gagaacgggg cgctggaccg 240
 ctacggggtg gaactgatcg gcgccgactt cgacgccatc cagcgcggcg aggaccggca 300
 gcggttcaag gacatcgctg ccaaggctcg cgggtgaatcc gcccgagcc gagtgtgttt 360
 caccatggac gaggtgcgcg agaccgtcgc cgaactgggc ctgccggtgg tgggtgcggcc 420

cagcttcacc atgggcgggc tgggctcggg gatggcgcgc tccgtcgagg aggtcgaccg 480
 gatggccggc gccgggctgg ccgaaagccc cagcgccaac gtgctgatcg aggaatccat 540
 ctacggctgg aaggaattcg aactcgagct gatgcgcgac ggcaacgaca acgtcgtcgt 600
 ggtgtgctcg atcga 615

<210> 236
 <211> 600
 <212> DNA
 <213> *Mycobacterium leprae*

<400> 236
 caagtgagtc tggtaactc taaccgggcc accatcatga ccgatccgga gttcgccgac 60
 cacacctatg tcgagccgat tacgccggcc ttcgtggagc gggtgattgt tcagcaggcc 120
 gagcgtggca acaggattga cgctttgcta gccaccttag gtgggcagac cgcgctcaac 180
 acagcggtag cgctgtacga aaacggagtg ttggagcgct atggcgtcga gctcatcggt 240
 gctgatttcg aggtatcca gcgtggtgag gaccggcagc gattcaaaga tctcgtcgct 300
 aaggttggtg gtgaatccgc tcgcagtaaa gtgtgtttca ccatggatga ggtgcgtgaa 360
 acagtcgagg atcttggcct tccggtggtg gtgcggccaa gtttcacgat gggcggattg 420
 ggttcgggca tggctcactc cgacgaggag gttggccgga tggccggcg cgggctggta 480
 gcttcaccta gtgccaacgt gctgatcgag gaatcgggtc atggttgga ggaattcgaa 540
 ctcgagctaa tgcgcgatgg acacgacagc gtcgtggtgg tgtgctcgat cgagaacggt 600

<210> 237
 <211> 618
 <212> DNA
 <213> *Nocardia farcinica*

<400> 237
 ggtgtcaag tccgagggcc tgcgcgtgtc gctggtgaac tcgaaccgga ccacgatcat 60
 gaccgatccc gagttcgccg acgccaccta cgtcgagccg atcaccgccg aattcgtcga 120
 gaaggtcatc gccaaaggagc gccccgacgc gatcctggcg accctcggcg ggcagaccgc 180
 gctcaacacc gcggtcgcgc tgcacgagcg cggcgtgctg gagaagtacg gcgtcgaact 240
 gatcggcgcc gacttcgacg ccatccagcg cggtgaggac cggcagaagt tcaaggacat 300
 cgtcgccaaag gtcggcggtg agagcgcccc ctcgcgggtc tgcttcacca tggacgaggt 360
 ccgcgagacc gtcgccgaac tgggcttccc ggtcgtcgtg cggccctcgt tcaccatggg 420
 cgggctcggc tcgggcatgg cctacaacga cgaggacctg gaccggatcg ccggtggcgg 480

cctggccgcc tcgccgaccg ccaacgtcct gatcgaggag tccatcctcg gctggaagga	540
atacgagctc gagctcatgc gcgacggccg cgacaacgtc gtggtggtct gtcctcatga	600
gaacgtcgac ccgatggg	618

<210> 238
 <211> 525
 <212> DNA
 <213> Streptomyces coelicolor

<400> 238	
ccggcgacga tcatgaccga cccggagatc gccgacgcca cctacgtcga gccgatcacc	60
cccgagttcg tcgagaagat catcgccaag gagcgccccg acgcccctct gcccacgctc	120
ggcgggccaga cggccctgaa caccgcgac tccctgcacg gcaacggcgt cctggagaag	180
tacggcgctcg aactgatcgg cgccaatgtg gaggccatca acaagggcga ggaccgcgac	240
ctgttcaagg aggtcgtcga ggaggtccgc aagaagatcg gccacggcga gtccgcccgg	300
tectacatct gccactccat ggacgacgtc ctcaaggcg tcgacgcgct cggcggctac	360
cccgtcgtcg tccgcccctc cttcaccatg ggcgggcgcc gctccggctt cgcccacgac	420
gaggacgaac tgcgccggat cgccggacag ggcctcacc tctcgccgac caccgaggtg	480
ctcctggagg agtccatcct cggctggaag gagtacgagc tggag	525

<210> 239
 <211> 618
 <212> DNA
 <213> Streptomyces avermitilis

<400> 239	
atcctgcgcg ccgagggcct cagggtcac tgggtcaact ccaaccggc gacgatcatg	60
accgaccgg agatcgccga cgccacctac gtcgagccga tcaccccgga gttcgtcgag	120
aagatcatcg ccaaggagcg gccggacgcg ctgctgcca cctcgggtg tcagacggcc	180
ctgaacaccg ccatctccat gcacgagcag ggtgtgctgg agaagtacgg tgcgagctg	240
atcggcgcca acgtcgaggc gatcaacaag ggcgaggacc gcgacctgtt caagggcgtc	300
gtcgaggccg tccgcgcgaa gatcgggcac ggcaatccg cccgctcggt catctgccac	360
tccatggacg acgtgctcga gggcgtcgag accctcggcg gttacccgt cgtcgtccgt	420
ccctccttca ccatgggcgg cgccggctcc ggcttcgcgc acgacgagga ggagctgcgc	480
cgcacgcgg gtcagggcct gacgctctcc ccgaccaccg aggtgctcct ggaggagtcc	540

atcctcggct ggaaggagta cgagctggag ctgatgcgcg acaagaacga caacgtcgtg 600
gtcgtctgct ccatcgag 618

<210> 240
<211> 625
<212> DNA
<213> *Corynebacterium efficiens*

<400> 240
tgctcaagga ggagggcctg cgcgtcacc tcatcaactc caaccggcc accatcatga 60
ccgaccccgga gatggcggac cacacctacg tcgagccgat cgagcccgag tacatcgaga 120
agatcttcca gaaggagatc gaacagggcc acccgatcga caccgtcctg gcaaccctcg 180
gcggacaaac cgcccttaac gctgccatcc agctggaccg cctcggcatc ctggagaagt 240
acaacgtcga gctcatcggt gccgacatcg acgccatcga gcgtgggtgag gaccgccaga 300
aattcaagga catcgtcgcc accatcggtg gtgaatcagc acgctccgcc gtctgccaca 360
acatggatga ggtctacgcc accgtcgagg agctcggtct cccggtcgtc gtgcgcccct 420
ccttcacat ggggtggtctg ggttccggtc tggcctacac catggaggac ctcgaccgca 480
tcgccggcgg tggcctcgcc gcctccccgg aggccaatgt cctgatcgag gagtccatcc 540
tcggctggaa ggaatacgag ctggagctca tgcgcgacgg cgatgacaat gtggtggtca 600
tctgctccat cgagaacgtc gatgc 625

<210> 241
<211> 636
<212> DNA
<213> *Corynebacterium glutamicum*

<400> 241
ctgaaggaag agggactgcg cgtcaccctc atcaactcca acccagcaac gatcatgacc 60
gaccagaaa tggctgacca cacctacgtg gagccaatcg agccggaata catcgacaag 120
attttcgcta aggaaatcga gcagggccac ccaatcgacg ccgtcctggc aacccttggt 180
ggccagactg cacttaacgc agctatccag ctggatcgcc tcggcatcct ggaaaagtac 240
ggcgttgaac tcatcggtgc agacatcgat gccattgagc gcggcgaaga tcgccagaag 300
ttcaaggata ttgtcaccac catcggtggc gaatccgcgc gttcccgct ctgccacaac 360
atggaagaag tccacgagac tgtcgagaa ctcggccttc cagtagtcgt gcgtccatcc 420
ttcactatgg gtggcctggg ctccggtctt gcatacaaca ccgaagacct tgagcgcac 480
gctggtggcg gacttgctgc atctcctgaa gcaaacgtct tgatcgaaga atccatcctt 540

ggttggaagg aattcgagct cgagctcatg cgcgataccg cagacaacgt tgtggttatc 600
 tgctccattg aaaacgtcga cgcactgggc gtgcac 636

<210> 242
 <211> 525
 <212> DNA
 <213> Bordetella parapertussis

<400> 242
 cccgccacca tcatgaccga ccccgaaacg gcggacgtca cctatatcga gcccattcacg 60
 tggcaagcgg tcgagaagat catcgagcgc gagaagcccg atgcgctgct gccaccatg 120
 ggtggccaga ccgcgctgaa ctgcgcgctc gacctggccc accacggcgt gctgaaaaag 180
 cacaacgtcg agctgatcgg cgccaacgag caccgcatcg agaaggccga agaccgccag 240
 aagttcaagc aggccatgac cgacatcggc ctggaatcgg ccaagtcggg cgtggccccac 300
 tcgatggacg aggcctggga agtgcagcgc cgcacatcgg ccgacatcgg caccggcggc 360
 tttcccgctc tcatccgccc cagcttcacg ctgggcggct cgggcggcgg catcgcctat 420
 aacgccgagg aattcgaggt catctgccgc cgcggcctgg aagcctcgcc gaccaaggag 480
 ctgctgatcg aggagtcgct gctcggctgg aaagagttcg agatg 525

<210> 243
 <211> 617
 <212> DNA
 <213> Bordetella bronchiseptica

<400> 243
 gcgctcaagg ccgaggggta ccggaccatc ctggtcaaca gcaaccccg caccatcatg 60
 accgaccccg aaacggcgga cgtcacctat atcgagcca tcacgtggca agcggtcgag 120
 aagatcatcg agcgcgagaa gcccgatcgc ctgctgcca ccatgggcgg ccagaccgcg 180
 ctgaactgcg cgctcgacct ggcccaccac ggcgctgctga aaaagcacia cgtcgagctg 240
 atcggcgcca acgagcacgc catcgagaag gccgaagacc gccagaagtt caagcaggcc 300
 atgaccgaca tcggcctgga atcggccaag tcgggcgtgg ccactcgat ggacgaggcc 360
 tgggaagtgc agcgcgcgat cgcggccgac atcggcacgg cgggctttcc cgtcgtcatc 420
 cgccccagct tcacgtggg cggctcgggc ggcggcacg cctataacgc cgaggaattc 480
 gaggtcatct gccgccgcgg gctggaagcc tcgccacca aggagctgct gatcgaggag 540
 tcgctgctcg gctggaaaga gtctgagatg gaagtggcgc gcgacaaggc ggacaactgc 600

atcatcgtct gctcgat 617

<210> 244
 <211> 617
 <212> DNA
 <213> Bordetella pertussis

<400> 244
 gcgctcaagg ccgaggggta ccggaccatc ctggtcaaca gcaaccccg caccatcatg 60
 accgaccccg aaacggcgga cgtcacctat atcgagccca tcacgtggca agcggtcgag 120
 aagatcatcg agcgcgagaa gcccgatgcg ctgctgcccc ccatgggtgg ccagaccgcg 180
 ctgaactgcg cgctcgacct ggcccaccac ggcgctgctga aaaagcacia cgctcgagctg 240
 atcggcgcca acgagcacgc catcgagaag gccgaagacc gccagaagtt caagcaggcc 300
 atgaccgaca tcggcctgga atcggccaag tcgggctggtg ccactcgat ggacgaggcc 360
 tgggaagtgc agcgccgcat cgcggccgac atcggcacgg cgggctttcc cgctcgatc 420
 cgccccagct tcacgtggg cggtcgggc ggcgcatcg cctataacgc cgaggaattc 480
 gaagtcatct gccgcccgg gctggaagcc tcgccgacca aggagctgct gatcgaggag 540
 tcgctgctcg gctggaaaga gttcgagatg gaagtgggtg gcgacaaggc ggacaactgc 600
 atcatcgtct gctcgat 617

<210> 245
 <211> 616
 <212> DNA
 <213> Burkholderia mallei

<400> 245
 ggcgttgctg gaggagggct acaaggatcat cctcgtcaac agcaacccgg cgacgatcat 60
 gaccgatccg aacacggcg acgtcacgta catcgagccg atcacgtggg aagtcgtcga 120
 gcgcattcat gcgaaggagc gcccgcacgc gatcctgccg acgatgggcg gccagaccgc 180
 gctgaactgc gcgctcgacc tgttccacca cggcgtgctc gagaagtacg gcgctcgagct 240
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 gatgacgaag atcggcctcg gctcggcgaa gtccggcatc gcgcactcga tggaagaggc 360
 gctgaagggtg cacgcggaca tcgcggcggc gacggggcgc agcggctacc cggtcgtgat 420
 ccgcccgctg ttcacgctcg gcggctcggg cggcggcac gcgtacaacc gcgaggagtt 480
 cgaggagatc tgcaagcgcg gcctcgatct gtcgccgacg cgcgagctgc tgatcgagga 540
 atcgtgctc ggctggaagg agtacgagat ggaggtcgtg cgcgatcgcg ccgacaactg 600

catcatcgtc tgctcg 616

<210> 246

<211> 616

<212> DNA

<213> Burkholderia pseudomallei

<400> 246

ggcgttgctg gaggagggct acaagggtcat cctcgtcaac agcaaccgag cgacgatcat 60
gaccgatccg aacacggcgg acgtcacgta catcgagccg atcacgtggg aagtcgtcga 120
gcgcacatc gcgaaggagc gccccgacgc gatcctgccg acgatgggag gccaaaccgc 180
gctgaactgc gcgctcgacc tgttccacca cggcgtgctc gagaagtacg gcgctcgagct 240
gatcggcgcg tcgccggagg cgatcgacaa ggccgaagac cgccagaagt tcaaggacgc 300
gatgacgaag atcggcctcg gctcggcgaa gtccggcacc gcgcactcga tggaagaggc 360
gctgaagggtg cacgcggaca tcgcggcggc gacggggcgg agcgggtacc cggtcgtgat 420
ccgcccgtcg ttacgctcg gcggctcggg cggcggcacc gcgtacaacc gcgaggagtt 480
cgaggagatc tgcaagcgcg gcctcgatct gtcgccgacg cgcgagctgc tgatcgagga 540
atcgctgctc ggctggaagg agtacgagat ggaggctcgtg cgcgatcgcg ccgacaactg 600
catcatcgtc tgctcg 616

<210> 247

<211> 625

<212> DNA

<213> Pseudomonas putida

<400> 247

gcctgtaaaag ccctgcgcga ggaagggttc cgcgtcatcc tgggtgaactc caaccagacc 60
accatcatga ccgaccggc catggctgac gccacctaca tcgagccgat caagtggcaa 120
tcggtggcca agatcatcga gaaagagcgc ccggacgccg tcctgccgac catgggtggc 180
cagaccgccc tgaactgcgc cctggacctg gagcgccacg gcgttctgga gaagtccggc 240
gtggagatga tcggtgcca cgtgacacc atcgacaagg ccgaagaccg ttcgcgcttc 300
gacaaggcca tgaaggacat cggcctggag tgcccgcgct ccggtatcgc ccacagcatg 360
gaagaggcca atgcggtcct cgagaagctc ggcttcccgt gcatcattcg cccgtcgttc 420
accatgggag gcaccggcgg cggtatcgct tacaaccgtg aagagttcga agaaatctgc 480
acccgtgggtc tggacctgtc gccgaccaa gagctgctga tcgacgaatc gctgatcggc 540

tggaaggaat acgagatgga ggtgggtccgc gacaagaagg acaactgcat catcgtctgc	600
tcgatcgaga acttcgaccc gatgg	625

<210> 248
 <211> 3234
 <212> DNA
 <213> *Yersinia pseudotuberculosis*

<400> 248	
atgccaaaac gtacagatat aaaaagcatc ctgattctgg gcgcaggccc gattgttatac	60
ggccaggctt gtgagtttga ctactccggt gcccaagcgt gtaaagcact gcgcgaagag	120
ggttaccgtg tcatttttgt gaactccaat ccggcgacta tcatgactga cccggaaaatg	180
gccgatgcaa cttatatcga gccaatcatc tgggaagtgg tgcgtaagat tatcgaaaaa	240
gagcgtccag atgctgtttt gcctacgatg ggtggccaaa ctgcactgaa ctgtgcattg	300
gaactggagc gtcaggggtgt tctggcagaa tttggcgtca ccatgattgg tgcgaccgcc	360
gatgccatcg ataaagccga agaccgccgt cgctttgata tcgcatgaa gaagatttgt	420
ctggatacgg cccgctcagg tattgcgcat aacatggaag aagcactggc tgttgccgct	480
gatgtgggct tcccgtgcat tatccgcccc tcctttacga tggggggcac tgggtggcgt	540
atcgcttata accgtgaaga gttcgaagag atctgcgagc gcggtctgga tttgtcacca	600
accaaagagt tgttgattga cgaatcgctg attggctgga aagagtacga gatggaagtt	660
gtccgtgata aaaacgacaa ctgcatcatc gtttgcacca ttgaaaactt cgatgcgatg	720
gggattcaca ccggcgactc tatcactgtc gcaccggctc agaccctgac cgataaagaa	780
taccaaataca tgcgtaatgc ctcatggcg gtactgcgtg aaatcggggg agaaaccggg	840
ggctctaacg tacagttctc cgtcaaccca aaaaatggtc gtttgattgt cattgagatg	900
aaccgcgctg tttctcgctc ttcagcactg gcctctaaag caaccggttt cccgattgcc	960
aagattgccg ccaaactggc ggtcgggttac aactggatg agttgatgaa tgacatcacc	1020
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cgctttaact ttgaaaaatt tgcgggtgcc aacgaccggt tgaccacgca aatgaagtct	1140
gtgggtgaag tcatggccat tggccgcacg cagcaagaat cactgcaaaa agcactgcgc	1200
gggctggaag tgggcgcgac cggttttgac ccgaaagtga gcctggatga tcccgaagca	1260
ctgactaaaa ttcgtcgtga attgaaagaa gcgggtgcag aacgtatctg gtatatcgct	1320
gatgctttcc gtgcgggcat gtcggttgat ggtgtgttca atctgaccaa tgttgatcgc	1380

tggttcctgg tgcagattga agagctgggt cgtctggaag agagcgtggc agaactcgggt	1440
atcaacgggt tgactgctga atttatgcgt cacttgaaac gtaaagggtt cgccgatgct	1500
cgtttggtta aattgggtcg tgcagcagaa agtgaagtcc gtaaactgcg ttacaaatat	1560
ggtttacacc cggtttataa gcgtgttgat acctgcgcgg cagagttctc gacggatacg	1620
gcttacatgt actccaccta cgaggaagag tgcgaatcta acccaaccag cgatcgtccg	1680
aaagtgatgg tgctgggtgg cggtccgaac cgtatcggac aaggatttga gttcgactat	1740
tgctgcgtac acgcttcatt ggccactgcgt gaagacgggt acgaaaccat catgggtgaac	1800
tgtaaccctg agacggtttc aaccgattat gacacctctg atcgtctcta cttcgagtca	1860
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 <213> *Yersinia pestis*

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<210> 250
 <211> 3231
 <212> DNA
 <213> *Vibrio cholerae*

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<210> 251
 <211> 3234
 <212> DNA
 <213> *Vibrio vulnificus*

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 <211> 3234
 <212> DNA
 <213> *Vibrio parahaemolyticus*

<400> 252	
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 <212> DNA
 <213> Campylobacter jejuni

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 <211> 3357
 <212> DNA
 <213> *Corynebacterium diphtheriae*

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 <212> DNA
 <213> Providencia stuartii

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 <221> misc_feature
 <222> (7)..(8)
 <223> n is a, c, g, or t

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<211> 464

<212> DNA

<213> *Proteus mirabilis*

<220>

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<222> (9)..(10)

<223> n is a, c, g, or t

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gttactgtcc ggtgctcatg ctatggataa tcactttaga accactgaag ctgaaaataa    120
tattccgatg atattggcgc ttattggcat ttggtataac aatttttttg gtaccgaaac    180
tgaagcgatt ctgccatacg atcaatatat gcaccgtttt gctgcttact tccaacaagg    240
taatatggaa tccaatggta aatatatcga ccgtgatgga aacaaagtca gttaccaaac    300
cggacctatt atttggggag agccggggac taatggtcag catgcggttt atcaattaat    360
tcataagga accaaactga tcccttgtga ttttattgca ccagcgatca gccataatcc    420
attatctgat catcatgcaa aactaatgtc gaacttcttc gcaa                    464
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<210> 259

<211> 462

<212> DNA

<213> *Proteus vulgaris*

<220>

<221> misc_feature

<222> (8)..(8)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (461)..(461)
<223> n is a, c, g, or t

<400> 259
ttatggtngc tattggtttg tctatcgctc tttccgttgg ttatgataat tttgagcaat 60
tattggaagg tgcccatgca atggataacc atttccaaac gacagctgct gaaaataacc 120
taccaatgat cctcgcgctg attggcattt ggtataacaa tttttttggt acagaaactg 180
aagcgattct gccctatgat caatacatgc atcgttttgc agcctatttc caacaaggca 240
atatggagtc aaatggtaag tatattgata gcgatggtaa cgcagttaac tatcaaactg 300
gacctattat ttggggtgaa ccaggaacta atggtcagca tgcgttttac caattaattc 360
atcagggtag aaaaatgata ccttgtgatt ttattgcgcc tgcaattagt cataatccat 420
taagtgatca ccatgctaag ttgatgtcta acttcttcgc na 462

<210> 260
<211> 462
<212> DNA
<213> Enterobacter aerogenes

<400> 260
ctgtgggtccg cctcggtctg tctatcattc tgtccgtcgg cttcgacaac ttcgttcagc 60
tgctgtccgg cgcccaagcc atggacaaac acttctctac cagccggct gagaaaaacc 120
tgccggtact gctggcgctg attggtatct ggtacaacaa tttcttcggc gccgaaaccg 180
aagcaattct gccgtacgat cagtacatgc atcgctttgc cgcttacttc cagcagggca 240
acatggaatc caacggtaag tacgttgacc gtaacggcaa cgctcgatgat taccagactg 300
gccctatcat ctggggcgag ccgggggacta acggtcagca cgcgttctat cagctgatcc 360
accagggcac caaaatggta ccgtgcgatt tcatcgcccc ggctatcacc cataaccgcg 420
tgtctgacca ccatcagaaa ctgctgtcta acttcttcgc aa 462

<210> 261
<211> 464
<212> DNA
<213> Klebsiella pneumoniae

<220>
<221> misc_feature

<222> (462)..(462)
 <223> n is a, c, g, or t

 <400> 261
 ctgtggtcgg cgattggtct gtccatcatt ctctccgtgg gcttcgacaa cttcgttgag 60
 ctgctgtccg ggcgcgatgc gatggataag cacttctcca ccactccggc ggagaaaaac 120
 ctgccggtgc tgctggcgct gatcggcatc tgggtacaaca acttcttcgg tgcggaaacc 180
 gaagcgattc tgccgtacga ccagtacatg caccgctttg ccgcttactt ccagcagggc 240
 aacatggagt ccaacggtaa gtatgttgac cgtaacggcc acgcggtaga ctaccagact 300
 ggcccaatca tctgggggtga gccgggcacc aacggtcagc acgcgttcta ccagctgac 360
 caccagggca ccaaaatggg accgtgcgat ttcacgcctc cggctatcac ccacaacccg 420
 ctgtctgacc accatcagaa actgctgtct aacttcttcg cnaa 464

<210> 262
 <211> 464
 <212> DNA
 <213> Escherichia coli

<220>
 <221> misc_feature
 <222> (9)..(9)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (462)..(462)
 <223> n is a, c, g, or t

<400> 262
 tttgtggtng cgattggcct gtcgattggt ctctccatcg gctttgataa cttcgttgaa 60
 ctgctttctg gcgcacacgc gatggacaag catttctcca ccacgcctgc cgagaaaaac 120
 ctgcctgtac tgttggcgct gattggcatc tgggtacaaca atttctttgg tgcggaaact 180
 gaagcgattc tgccgtatga ccagtatatg caccgtttcg cggcgtactt ccagcagggc 240
 aatatggagt ccaacggtaa gtatgttgac cgtaacggta acgttgtgga ttaccagact 300
 ggcccgatta tctgggggtga accaggcact aacggtcagc acgcgttcta ccagctgac 360
 caccagggaa ccaaaatggg accgtgcgat ttcacgcctc cggctatcac ccataacccg 420
 ctctctgac accaccagaa actgctgtct aacttcttcg cnaa 464

<210> 263
 <211> 465

<212> DNA
<213> Escherichia coli

<220>
<221> misc_feature
<222> (10)..(10)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (463)..(463)
<223> n is a, c, g, or t

<400> 263
ctttgtggtg ggcgattggcc tgcgatttgt tctctccatc ggctttgata acttcggtga 60
actgctttcc ggcgcacacg cgatggacaa gcatttctcc accacgcctg ccgagaaaaa 120
cctgcctgta ctgctggcgc tgattggcat ctggtacaac aatttctttg gtgcggaaac 180
tgaagcgatt ctgccgtatg accagtatat gcaccgtttc gcggcgtagt tccagcaggg 240
caatatggag tccaacggta agtatgttga ccgtaacggt aacgttgtgg attaccagac 300
tggtcccgatt atctgggggtg aaccaggcac taacggtcag cacgcgttct accagctgat 360
ccaccaggga accaaaatgg taccgtgcga tttcatcgct ccggctatca ccataaccc 420
gctctctgat catcaccaga aactgctgtc taacttcttc gcnaa 465

<210> 264
<211> 463
<212> DNA
<213> Citrobacter freundii

<220>
<221> misc_feature
<222> (1)..(1)
<223> n is a, c, g, or t

<400> 264
ntgtggtctg caatcggcct gtccatcatc ctgtccgtag gcttcgacaa ttttgttgag 60
ctgctctccg ggcgcgatgc gatggacaaa cacttctcca ccaccccggc tgagaaaaac 120
ctgccggtgc tgctggcgct gatcggtatc tgggtacaac acttcttcgg tgccgaaacc 180
gaagcgattc tgccgtatga ccagtatatg caccgtttcg cggcctactt ccagcagggc 240
aacatggaat ccaacggtaa atacgttgac cgtaacggca atgcggtgga ttaccagact 300
ggcccaatca tctgggggtga gccgggtact aacggccagc atgcgttcta ccagctgac 360
caccagggca ccaaaatggt gccgtgcgat ttcatcgcg cggcaatcac ccacaacccg 420

ctgtcggatc accatccgaa actgctgtct aacttcttcg caa

463

<210> 265
<211> 465
<212> DNA
<213> Haemophilus influenzae

<220>
<221> misc_feature
<222> (4)..(4)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (8)..(8)
<223> n is a, c, g, or t

<400> 265
cttnggtngc cttggtcttt caattgcgct atcaattggc tttgaaaact ttgaagcgtt 60
attaatggc gcgcatgaaa tggatgaaca tttccgctct actccaatcg aacaaaatat 120
cccaaccact ttagcattag ttggtttatg gaataccaat tttcttggtg cgcaaacaga 180
agcgatctta ccttatgac aatatttaca tcgcttcgca gcttattttc aacaaggtaa 240
tatggaatca aatggtaa atgtggatcg tgatggcaat gtcattaaca attatcaaac 300
tggccctatc atttggggag aacctggtac aaacggacaa cacgcgttct atcaattaat 360
tcataaggc actacttta ttcccttgta ttttatcgca cccgctcaaa gccataaccc 420
attggcagat catcacaata aattgctttc aaacttcttc gccaa 465

<210> 266
<211> 462
<212> DNA
<213> Serratia marcescens

<220>
<221> misc_feature
<222> (418)..(418)
<223> n is a, c, g, or t

<400> 266
tgtggtcggc gatcggtttg tcgattgcgc tgtccatcgg ttatgacaac ttcgagcagc 60
tgctgagcgg cgcgcacgcc atggacaagc acttcgccga aacgccggcg gagaaaaacc 120
tgccggtggt gctggcgctg atcggtatatt ggtacaacaa cttctttggc gccgaaaccg 180
aagccattct gccgtacgat cagtacatgc accgttttgc cgcttacttc cagcagggca 240

acatggaatc caacggcaag tacgtcgatc gcaacggcaa cccggtggat taccagaccg 300
 gtcccatcat ttggggcgag ccgggcacca acggccagca tgcgttctat cagttgatcc 360
 accagggcac caagctgggtg ccgtgcgatt tcatcgcgcc ggccatcagc cataaccngc 420
 tgggcgatca tcacgcaaaa ctgctgtcca acttcttgcc aa 462

<210> 267
 <211> 462
 <212> DNA
 <213> *Morganella morganii*

<400> 267
 gtggtcggcg attggtctgt ctatcgtgct ctctgtcggg tatgacaact tcacgcagtt 60
 gctcgatggg gcgtatgcc a tggacaagca cttcaccgaa actgaattct cacagaatat 120
 tccggtgctg ctggcgctga ttggtctgtg gtacaacaat ttcttcgggtg cggaaacaga 180
 agcaattctg ccttatgatc agtacatgca ccgctttgcg gcctatttcc agcagggcaa 240
 tatggagtcc aacgggaaat atgtggatcg taacggtaag gtggtttctc atcagaccgg 300
 tccggttata tggggtgagc ccggcaccaa cgggcagcat gcgttttata agctgatcca 360
 tcagggtacc aaactgatcc cgtgtgattt tatcgcaccg gctcagagcc ataatccgct 420
 gggggatcat cacagtaaac tgctgtcgaa cttcttcgcc aa 462

<210> 268
 <211> 461
 <212> DNA
 <213> *Klebsiella oxytoca*

<400> 268
 gtggtagcct cggcctgtcc atcatcctgt ccgtgggctt cgacaacttt gttgagctgc 60
 tctccggcgc gcacgcgatg gataaacact tctccaccac cccggctgag aaaaacctgc 120
 cgggtgctgct ggcgctgatc ggtatctggt acaacaactt cttcggcgct gaaaccgaag 180
 cgattctgcc gtacgaccag tatatgcacc gttttgccgc ttacttccag cagggcaaca 240
 tggaatccaa cggtaaatac gttgaccgta acggcaacgc cgtggattac cagacggggc 300
 caatcatctg gggcgagccg gggaccaacg gtcagcacgc gttctaccag ctgattcacc 360
 aggggaccaa aatggtgcct tgcgacttta tcgcgccggc gattacgcat aaccgctgt 420
 ccgatcacca tccgaagctg ctgtctaact tcttcgcca a 461

<210> 269

<211> 463
 <212> DNA
 <213> Shigella sonnei

<220>
 <221> misc_feature
 <222> (9)..(9)
 <223> n is a, c, g, or t

<400> 269
 tttgtggtng cgattggcct gtcgattggt ctctccatcg gctttgataa cttcgttgaa 60
 ctgctttctg ggcgcacgc gatggacaag ctttctcca ccacgcctgc cgagaaaaac 120
 ctgcctgtcc tgctggcgct gattggcatc tggtaacaata atttctttgg tgcggaaact 180
 gaagcgattc tgccgtatga ccagtatatg caccgtttcg cggcgactt ccagcagggc 240
 aatatggagt ccaacggtaa gtatgttgac cgtaacggta acgttggtga ttaccagact 300
 ggcccgatta tctgggggtga accaggcact aacggtcagc acgcgttcta ccagctgac 360
 caccaggga ccaaatggt accgtgcgat ttcatcgccc cggctatcac ccataacccg 420
 ctctctgac accaccagaa actgctgtct aacttcttcg caa 463

<210> 270
 <211> 463
 <212> DNA
 <213> Salmonella enteritidis

<220>
 <221> misc_feature
 <222> (13)..(13)
 <223> n is a, c, g, or t

<400> 270
 gctgtggtct gentcgggct gtccattatt ctgtccgctg gtttcgacaa ctttgtcgag 60
 ctgctttccg ggcgcacgc gatggacaag ctttctcca cactccggc ggagaaaaac 120
 ctaccattc tgctggcggt gattggcatc tggtaacaata atttcttcgg cgcggaaacc 180
 gaagccattc tgccgtacga ccagtatatg caccgtttcg ccgcctactt ccagcagggc 240
 aacatggaat ccaacggtaa atacgttgac cgtagcggca acgcgttgga ttaccagaca 300
 ggccaatta tctggggcga accaggcacc aacggtcagc acgcgtttta tcaattgatt 360
 caccagggt ctaaatggt gccgtgtgat ttatcgccc cggctatcac ccataacccg 420
 ctatccgac atcatcagaa gctgctgtct aacttcttcg caa 463

<210> 271
 <211> 464
 <212> DNA
 <213> Salmonella enterica hadar

<220>
 <221> misc_feature
 <222> (14)..(14)
 <223> n is a, c, g, or t

<400> 271
 cgctgtgggc tgcntcgggc tgtccattat tctgtccgtc ggtttcgaca actttgtcga 60
 gctgctttcc ggcgcgcacg cgatggacaa gcatttctcc accactccgg cggagaaaaa 120
 cctacccatt ctgctggcgt tgattggcat ctggtacaac aatttcttcg gcgcggaaac 180
 cgaagccatt ctgccgtacg accagtatat gcaccgtttc gccgcctact tccagcaggg 240
 taacatggaa tccaacggta aatacgttga ccgtagcggc aacgccgtgg attaccagac 300
 aggcccaatt atctggggcg aaccaggcac caacggtcag cacgcgtttt atcaattgat 360
 tcaccaggt actaaaatgg tgccgtgtga ttttatcgcc ccggtatca ccataaccc 420
 gctatccgat catcatcaga agctgctgtc taacttcttc gcaa 464

<210> 272
 <211> 466
 <212> DNA
 <213> Salmonella enterica brandenburg

<220>
 <221> misc_feature
 <222> (1)..(1)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (464)..(464)
 <223> n is a, c, g, or t

<400> 272
 ncgctgtggt ctgcctcggg ctatccatta ttctgtccgt cggtttcgac aactttgtcg 60
 agctgctttc cggcgcacac gcgatggaca agcatttctc caccactccg gcggagaaaa 120
 acctaccgt tctgctggcg ttgattggca tctggtacaa caatttcttc ggcgcggaaa 180
 ccgaagccat tctgccgtac gaccagtata tgcaccgttt cgcgcctac ttccagcagg 240
 gcaacatgga atccaacggt aaatacgttg accgtaacgg caacgccgtg gattaccaga 300
 caggcccaat tatctggggc gaaccaggca ccaacggtca gcacgcgttt tatcaattga 360

ttcaccaggg tactaaaatg gtgccgtgtg attttatcgc cccggctatc acccataacc 420
 cgctatccga tcatcatcag aagctgctgt ctaacttctt cgcnaa 466

<210> 273
 <211> 464
 <212> DNA
 <213> Salmonella enterica derby

<220>
 <221> misc_feature
 <222> (13)..(13)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (462)..(462)
 <223> n is a, c, g, or t

<400> 273
 gctgtggtct gntcgggct gtccattatt ctgtccgtcg gtttcgaca ctttgtcgag 60
 ctgctttccg ggcgcgcacg gatggacaag catttctcca cactccggc ggagaaaaac 120
 ctaccattc tgctggcggt gattggcatc tggtagaaca atttcttcgg cgcggaaacc 180
 gaagccattc tgccgtacga ccagtatatg caccgtttcg ccgcctactt ccagcagggt 240
 aacatggaat ccaacggtaa atacgttgac cgtaacggca acgccgtgga ttaccagaca 300
 ggcccaatta tctggggcga accaggcacc aacggtcagc acgcgtttta tcaattgatt 360
 caccagggtc ctaaaatggt gccgtgtgat tttatcgccc cggctatcac ccataaccgc 420
 ctatccgac atcatcagaa gctgctgtct aacttcttcg cnaa 464

<210> 274
 <211> 463
 <212> DNA
 <213> Salmonella enterica virchow

<400> 274
 cgctgtggtc tgccctgggc tgtccattat tctgtccgtc ggtttcgaca actttgtcga 60
 gctgctttcc ggcgcgacg cgatggacaa gcatttctcc accactccgg cggagaaaaa 120
 cctaccatt ctgctggcgt tgattggcat ctggtacaac aatttcttcg gcgcggaaac 180
 cgaagccatt ctgccgtacg accagtatat gcaccgtttc gccgcctact tccagcaggg 240
 taacatggaa tccaacggta aatacgttga ccgtaacggc aacgccgtgg attaccagac 300
 aggcccaatt atctggggcg aaccaggcac caacggtcag cgcgcgtttt atcaattgat 360

tcaccagggt actaaaatgg tgccgtgtga ttttatcgcc cgggctatca ccataaacc 420
gctatccgat catcatcaga agctgctgtc taacttcttc caa 463

<210> 275
<211> 464
<212> DNA
<213> Salmonella enterica typhimurium

<220>
<221> misc_feature
<222> (13)..(13)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (462)..(462)
<223> n is a, c, g, or t

<400> 275
gctgtggtct gcntcgggct gtccattatt ctgtccgtcg gtttcgaca ctttgtcgag 60
ctgctttccg ggcgcgcacg gatggacaag catttctcca ccaactccggc ggagaaaaac 120
ctacccattc tgctggcggt gattggcatc tgggtacaaca atttcttcgg cgcggaaacc 180
gaagccattc tgccgtatga ccagtatatg caccggttcg ccgcctactt ccagcagggt 240
aacatggaat ccaacggtaa atacgttgac cgtaacggca acgcggtgga ttaccagaca 300
ggcccaatta tctggggcga accaggcacc aacggtcagc acgcgtttta tcaattgatt 360
caccagggta ctaaaatggg gccgtgtgat tttatcgccc cggctatcac ccataaaccg 420
ctatccgatc atcatcagaa gctgctgtct aacttcttcg cnaa 464

<210> 276
<211> 464
<212> DNA
<213> Salmonella enterica paratyphi B

<220>
<221> misc_feature
<222> (14)..(14)
<223> n is a, c, g, or t

<400> 276
cgctgtggtc tgcntcgggc tgtccattat tctgtccgtc ggtttcgaca actttgtcga 60
gctgctttcc ggcgcgcacg cgatggacaa gcatttctcc accactccgg cggagaaaaa 120
cctacccatt ctgctggcgt tgattggcat ctggtacaac aatttcttcg ggcgggaaac 180

cgaagccatt ctgccgtatg accagtatat gcaccgtttc gccgcctact tccagcaggg 240
 taacatggaa tccaacggta aatacgttga ccgtaacggc aacgccgtgg attaccagac 300
 aggcccaatt atctggggcg aaccaggcac caacggtcag cacgcgtttt atcaattgat 360
 tcaccagggg actaaaatgg tgccgtgtga ttttatcgcc ccggctatca ccataaccc 420
 gctatccgat catcatcaga agctgctgtc taacttcttc caaa 464

<210> 277
 <211> 464
 <212> DNA
 <213> *Serratia liquefaciens*

<220>
 <221> misc_feature
 <222> (1)..(1)
 <223> n is a, c, g, or t

<400> 277
 ntgtggtcgg cgattggcct gtctatcgcc ctgtcagtgg gttacgagaa ttttgaacag 60
 ttgctgagcg gcgcgcacgc gatggacaaa cacttcgcgc aaacgccggc agagcaaaac 120
 ctgccggtgc tgctggcggt gatcggtatc tggtaacaac acttcttcgg tgcagaaacc 180
 gaagctatcc tgccgtacga ccagtacatg caccggtttg ccgcttactt ccagcagggc 240
 aacatggaat ccaacggtaa atatgtcgat cgcaacggca atccgggtgga ctaccagacc 300
 ggcccaatca tctggggcga gccgggcacc aacgggcagc acgcgtttta ccaactgac 360
 caccagggga ccaaactggg gccttgtgac tttatcgcg cggccatcag ccataatccg 420
 ctgagcgacc accatgcaaa actgctgtcg aacttcttcg ccaa 464

<210> 278
 <211> 1860
 <212> DNA
 <213> *Neisseria meningitidis* serogroup A

<400> 278
 acagaaaatc ctcgaagaca ccctgctgga acaatggcag tggctcaaac ctaaagaacc 60
 gtaaacaatc tgcgtaacaa aatgccgtct gaaacgcccc cacgcttcag acggcagacc 120
 gtaaaaccta caacccaat tctcccaaa tctcatcaat cttagccgta accgcagggg 180
 cttttttaat caccgcgcc cattcgcggt cggtttcgcc cggccacttg ttggtcgcat 240
 ccaaaccat tttgccgcca agtccgctga cggggctggc gaagtcgagg tagtcgatgg 300

gcgtgttttc catcaaaacg gtatcgcgca cggggtccat gcgcgtgggt accgcccaga	360
tgactttcttt ccagtcgcgc acatccacat cgtcatccac cacaatgatg aatttggtgt	420
acataaactg gcgcaggaac gaccagcagc ccatcatcac gcgcttggcg tgtccggcgt	480
actgtttttt catgctcacc accgccatgc ggtaggagca gccttcgggc ggcaggtaaa	540
aatcggtgat ttcggggaac tgcttttgca aaagcggtag gaacacttcg ttcaacgcca	600
cgcccaaac ggcggttca tcgggcgggt tgctgtgta ggtagagtgg taaatcgggt	660
tttcgcgcat ggtgatgcgt tcgaccgtaa acacggggaa atggctctgc tcgttgtaat	720
agcccgtgtg gtcgccgtat ggaccttcca acgcggtttc gtttggtatg atgacgcctt	780
ccaacacgat ttctgcgcgg gcaggcactt gcaaactcgt gccgatacat ttcaccagtt	840
ccgtccgcga accgcgcagc agtccggcaa actggtattc gctcaaggta tcgggaacgg	900
gcgttaccgc gcccaaatg gtggcagggc cgcagccgag cacgacggcg acgggatacg	960
gcgtatcggg attgagtttg cggaattcct gataatccag cgcgccgccg cgatgcgaca	1020
gccagcgc atcagcttg tttatgccga ttaattgttg gcggtaaatg ccgagatttt	1080
ggcgtttttt gtgcggcccg cgcgtgacgg tcaagcccca cgttaccagc ggcgcaacgt	1140
cttccggcca gcaatgctga atcggaagtt gatacaaatc aacgtcttcg ccttcccata	1200
cgatttcctg acacggcgca tttttcacca cgttcggcgc catgctccaa atgtctttca	1260
agagcggcag tttggaaaac gcgtctttta tgcttttggg cggttcgggt tctttcaa	1320
acgccagcgt ctgcccatt tcgcgcagct tggacacgct gtccgcgcc atgccatcg	1380
ccacacgttc gggcgtgccg aacaggtttg ccaacacggg ataatcatag cgcgtaccgt	1440
cgggcttaac tgggtgttca aacaacaacg ccggcccttc ggcgcgcagc acgcggtcgg	1500
cgatttcggt catttccaaa tgcggggaaa cggggtgcgc gatgcgtttg agtttgccct	1560
gctgctcgag catggcgatg aagtcgcgca ggtctttgta tttcatattc atcctttttg	1620
tccttttata ctgagcaatc cgattcggat accgccccta tccttgctg cgcttcggca	1680
tattctatgc cgtgataaaa gtcgcgtacc agcggatggt cgctgccttg atggagtgc	1740
aacaaaggac gttgaccatc gggttgggta acgacattgc aatgcaaacc gaagggtgcg	1800
gattcgtaag ggggcagccg gttgcagatc atgccgaaat aaacggcgtt ttcagggttg	1860

<210> 279
 <211> 588
 <212> DNA
 <213> *Klebsiella oxytoca*

<400> 279
acgaccagac gcccatcatg acgcgtttcg cgtgaccggc gtactgcttc ttcacgtga 60
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actgcttttg cagaatgggg acgaacactt cgttcagcgc aacgcccagt accgccggct 180
catccggcgg gcgcccggta taggtcgagt gatagatggc atcttcacgc tgagtaatgt 240
gggtaacggg aaagaccggg aagttatcca cttcattgta gtagccagta tggtcgccat 300
aggggccttc cggcgccatt tctccggctt caatataccc ttccagcacg atctccgcgc 360
tggcgggcac ctcaagatcg ttagagatgc acttcacgac ttcggttttg gtgcgcgcga 420
gtagcccggc aaaagcgtat tcggaaagag tatccggaac cggagtcacc gccccgagaa 480
tggttgccgg atcggcgccc agcgcgacgg agaccgggaa acgctcgcca ggacgcgccg 540
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<210> 280

<211> 1479

<212> DNA

<213> *Salmonella enterica* subsp. *enterica* serovar

<400> 280
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<210> 281
 <211> 1488
 <212> DNA
 <213> *Salmonella typhimurium*

<400> 281	
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atcgtgacc gcacgctgcg tgccggtgga ccggcggtgc tgtttgaaaa tcctaaaggt	180
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cctgagccgc cgaaaggctt tcgcgatctg tttgacaagc tgccgcagtt taagcaagt	360
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aatggccgg gcgaaacca acgcgagtg ggctgccta ttgttaaaga tcctgaagtt	1440
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<210> 282
 <211> 1494
 <212> DNA
 <213> Escherichia coli

<400> 282	
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cgacttttgc gtgccggtgg gcctgcgctg ttgttcgaaa accctaaagg ctactcaatg	180
ccggtgctgt gcaacctgtt cggtagcca aagcgcgtgg cgatgggcat ggggcaggaa	240
gatgtttcgg cgctgcgtga agttggtaaa ttattggcgt ttctgaaaga gccggagccg	300
ccaaaagggt tccgcgacct gtttgataaa ctgccgcagt ttaagcaagt attgaacatg	360
ccgacaaagc gactgcgtgg tgcaacctgc caacaaaaaa tcgtctctgg cgatgacgtc	420
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gagtatcgt ttgccggatt gctgcgcggt accaagaccg aagtggtgaa gtgtatctcc	780
aatgaccttg aagtgccgcg cagtgcggag attgtgctgg aagggtatat cgaacaaggc	840

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<210> 283

<211> 1494

<212> DNA

<213> Escherichia coli

<400> 283

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cgcactttgc gtgccggtgg gcctgcgctg ttgttcgaaa accctaaagg ctactcaatg	180
ccggtgctgt gcaacctgtt cggtacgcca aagcgcgtgg cgatgggcat ggggcaggaa	240
gatgtttcgg cgctgcgtga agttggtaaa ttattggcgt ttctgaaaga gccggagccg	300
ccaaaagggt tccgcgacct gtttgataaa ctgccgcagt ttaagcaagt attgaacatg	360
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<210> 284

<211> 1479

<212> DNA

<213> *Salmonella enterica* subsp. *enterica* serovar Typhi

<400> 284

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 cgcacgctgc gtgccgggtg accggcgttg ctgtttgaaa atcctaaagg ttacgccatg 180
 ccggtgctgt gcaacctttt tggcacgcca aaacgcgtgg cgatgggcat ggggcaggat 240
 gatgtttccg ccttacggga agtgggtaaa ttattagcgt ttctgaaaga acctgagccg 300
 ccgaaaggct ttcgcgatct gtttgacaag ctgccgcagt ttaagcaagt gctgaatatg 360
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 gatttaacgc gtcttctgt catgacctgt tggccggacg acgccgcgcc gctgattacc 480
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 cagcagttga taggtaaaaa taagctgatt atgcgctggc tgtctcaccg cggcggcgcg 600
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ggcgaaaccc aacgcgagtg gggtcgtcct attgttaaag atcctgaagt taccgcgcgt	1440
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<210> 285

<211> 1494

<212> DNA

<213> Escherichia coli

<400> 285

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cgcacgctgc gtgctgggtg gcctgcgctg ttgtttgaaa accctaaagg gtactcaatg	180
ccggtgctgt gcaacttggt cggtagccca aagcgcgtag cgatgggtat gggccaggaa	240
gatgtttcag cactgcgtga agtcggtaaa ttattagcat ttctgaaaga accagagccg	300
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tgggggctaa ccgttacacg tggccctcat aaagagcgac agaactctggg catttatcgc	540
cagcaactga ttggtaaaaa caagctgatt atgcgttggc tgtcgcatcg cggcggcgcg	600
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tgctcttate gcctggcggg agtgacaatc aaaaaacagt acgccggaca cgcgaagcgc	1140
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<210> 286
 <211> 1494
 <212> DNA
 <213> *Shigella flexneri*

<400> 286	
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<210> 287

<211> 1467

<212> DNA

<213> *Pseudomonas aeruginosa*

<400> 287

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cgcgccaagg gcccggcatt gctgttcgaa aagccgaccg gcttcgacat gccggtgctc 180
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cggctgccgg tccagacctg ctggccgggc gatgtcgggc cgctgatcac ctggggcctg 480
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 ctctggtcga gcctcgggat cgactga 1467

<210> 288

<211> 1467

<212> DNA

<213> *Pseudomonas syringae* pv. tomato

<400> 288

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 cgcgccaaag gcccggccct gctgtttgaa aaccgggttg gctttgatat tccggtgctg 180
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<210> 289
 <211> 1497
 <212> DNA
 <213> *Yersinia pseudotuberculosis*

<400> 289	
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<210> 290

<211> 1485

<212> DNA

<213> *Neisseria meningitidis* serogroup B

<400> 290

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gaaccogaac cgcccaaagg catcaaagat gcgttttcca aactgccgct gctgaaagac	360
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<210> 291
 <211> 1479
 <212> DNA
 <213> *Neisseria gonorrhoeae*

<400> 291
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 cgcgccgaag ggccggcggtt gttgtttgaa aaccgcgtta agcccagcgg tacgcgctat 180
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 gacgttgatt tgtatcagct tccgattcaa cattgctggc cggaagacgt tgcgccgctg 480
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<210> 292
 <211> 1497
 <212> DNA
 <213> *Yersinia pestis*

<400> 292	
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<210> 293

<211> 1653

<212> DNA

<213> *Pseudomonas putida*

<400> 293

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ccaaacaagg	cccgaacggc	gctacactct	gcaccccgac	cgatacggcc	aacacgaggc	180
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 gatgagctgt gggatcagtt ggaatagat tga 1653

<210> 294
 <211> 587
 <212> DNA
 <213> *Serratia marcescens*

<400> 294
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<210> 295

<211> 1560
 <212> DNA
 <213> Burkholderia mallei

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<210> 296
 <211> 1560
 <212> DNA
 <213> Burkholderia pseudomallei

<400> 296
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<210> 297

<211> 1545

<212> DNA

<213> Bordetella parapertussis

<400> 297

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 <212> DNA
 <213> Bordetella bronchiseptica

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 <212> DNA
 <213> Bordetella pertussis Tohama

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<210> 300

<211> 1467

<212> DNA

<213> Legionella pneumophila subsp. pneumophila str. Philadelphia

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 <211> 598
 <212> DNA
 <213> *Klebsiella pneumoniae*

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 <213> *Serratia liquefaciens*

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<210> 303
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 <212> DNA
 <213> *Brucella melitensis*

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 <212> DNA
 <213> Haemophilus influenzae

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<210> 305
 <211> 1425

<212> DNA
 <213> Pasteurella multocida

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 <212> DNA
 <213> Haemophilus ducrei

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<210> 307
<211> 1425
<212> DNA
<213> *Vibrio parahaemolyticus*

<400> 307

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<210> 308
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 <212> DNA
 <213> *Yersinia pestis*

<400> 308	
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<210> 309

<211> 1216

<212> DNA

<213> *Vibrio cholerae*

<400> 309

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<210> 310
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 <212> DNA
 <213> Escherichia coli

<400> 310	
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<210> 311
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 <212> DNA
 <213> Escherichia coli

<400> 311	
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<210> 312
 <211> 1560
 <212> DNA
 <213> *Pseudomonas aeruginosa*

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<210> 313
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 <212> DNA
 <213> Bordetella pertussis

<400> 313						
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<210> 314
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 <212> DNA
 <213> Bordetella parapertussis

<400> 314
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<210> 315
 <211> 1374
 <212> DNA
 <213> Burkholderia pseudomallei

<400> 315	
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<210> 316

<211> 1425

<212> DNA

<213> *Vibrio vulnificus*

<400> 316

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<210> 317
 <211> 1425
 <212> DNA
 <213> *Vibrio fischeri*

<400> 317	
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<210> 318
 <211> 1425
 <212> DNA
 <213> *Yersinia pseudotuberculosis*

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<210> 319

<211> 1467

<212> DNA

<213> *Salmonella enterica* subspecies *paratyphi* A

<400> 319

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<210> 320
 <211> 1425
 <212> DNA
 <213> *Salmonella typhimurium*

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<210> 321
 <211> 1425
 <212> DNA
 <213> *Shigella flexneri*

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<210> 322
 <211> 1329
 <212> DNA
 <213> *Pseudomonas syringae*

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 <212> DNA
 <213> Burkholderia mallei

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 <211> 1344
 <212> DNA
 <213> Legionella pneumophila

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ggattttaat tccaaagcag tgtacctctg tttcattaac gataaaatgc gatcggatcc	540
gctttgtacc ggaaggtgta aatgattggc aagctctgga acctcagcgt aggcattaat	600
caaattttca gaaaatgcc aaggatgtga tgttggtgaa cgtattcttc ctattccatc	660
gatagcggca atataatgaa ttaacagggc aagatcggct atatcccat tgtccataat	720
acctctgtaa tcgttcacat tttggcctag taaattaatc tctctgacgc cttgactggc	780
taattgataa cactcagcca atacatcatc aaatggtctg ctgatttctt cgccacgggt	840
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gatatcaaca acagatttat ttttctcaag ctttctattg agcagggcag ggagcctgtg	1020
taatgtctgt ggcccaata cgatatcaac aaacggtgct ctttttatga tgtctgagcc	1080
ttcttggtc gctacgcac ctcccactcc aatgagcaca tgagggtttt tggctttata	1140
ttctcgccat tgaccagtt gagaaaaaac ttttctctgt gctttttctc gaattgagca	1200

tgtgtttaat aaaataacat cggcatcctc gacttgatca gttttgacca aaccatggga	1260
agcgtaaagt acttctgccca ttttagaaga atcgtattca ttcatttggc agccatttgt	1320
tttaatatat aattttttaa ccat	1344

<210> 325
 <211> 1428
 <212> DNA
 <213> Bordetella bronchiseptica

<400> 325	
tcattcggct ccggatgtgt cgcgttcgat gccggcgaca cggccgcgca gcgagttggt	60
gtgggcgtgg gtgacgacga cgtcgaccat gtggccgatc aggcgcggca cgccgggaaa	120
gttgacgata cggttgttct cgttacggcc catcagctcg ttggggtcgc gccgcgaagg	180
gccttcgacc agcacgcgct ggcgggtgcc gatcatgccc tgggcgatgg ccgcggcctg	240
ctggttgatg agcgccctgca actgctgcag gcggcgcagc ttgacgtcct gcggcgtgtc	300
atcgtgcagg tcggcggccg gcgtgccggg ccggcgcgaa tacacgaacg agaacgaggt	360
gtcgaagccg acgtcctcga tcagcttcat ggtcttcttg aagtcctcct cggctctgcc	420
cgggaaaccg acgatgaagt ccgaggacag cgtcaggctg gggcgcgcag cgcgcaggcg	480
gcgcaccacg gacttgaact ccagcgcggt gtagccgcgc ttcattggccg ccagcaccgc	540
gtcgtgccg gcctgcaccg gcaggtgacg gaacgacacc agcttgggca gccgtgcgta	600
ggcgtcgacc atgcgtggg tcatttcctt cggatgcgag gtcgtgtagc ggatccgttc	660
gataccggga atctcgtgca cgtattccag cagcatggcg aaatcggcga tttcgccgct	720
gtcggccatg gcgcgcggt aggcgttgac gttctggccc agcagcgtga cttccttgac	780
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ttcgccgcgc gtgtagggca ccacgcagaa gctgcaatac ttgctgcagc cttccatgat	900
ggacacgaac gcggtggcgc cgtcgacgcg cggcgggggc agggcgtcga acttctcgat	960
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gatggcctcg ccctcctggc tggccacgca gccgcccacg ccgatcacca gggtgggggt	1140
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gcgcacggaa cagggtgttg acaggatgac atcggcatcc tcggggttgt cggtcagctc	1260
caggccctgg tcggcgcgca gcacgtcggc catcttgtcc gagtcgtact cgttcatctg	1320

gcagccgaag gtgcggatat acaatttgcc caggccctgg gcggtggtgg ccggcgtgcc 1380
ggcatcggac gggctggcgc cgtcgcgttt gacagtgggt tcttgcat 1428

<210> 326
<211> 597
<212> DNA
<213> Enterococcus faecalis

<400> 326
ctatttgaag ggcgcaagggt gtcatgttgg atatcgatca aggaacctat ccatttggtta 60
cttctcttaa tccagtagct ggtggcgtaa ctatcggtag tggcgttgggt ccatcaaaaa 120
ttaataaagt ggttggtgtc tgcaaagcgt acacttcacg tgtcgggtgac ggcccattcc 180
caacagaatt atttgatgaa acaggagaaa ccattcgtcg tgtcggtaaa gaatacggaa 240
caacaacagg acgtccgcgt cgtgtcgggt ggtttgattc agtagtcatg cgtcattcaa 300
aacgtgtatc agggattaca aacttgtcat taaactcgat tgacgtgtta agtggtttag 360
aaacggtgaa aatttgtaaa gcttatgaac ttgatgggtga attaatttat cattatccag 420
caagcttgaa agaattaagc cgctgtaaac cagtttatga agaattacca ggttggtctg 480
aagatatcac tggttgcaaa actttagccg atttaccagc taatgctcgt aactatgtgc 540
atcggatttc agaattagtt ggtgtgcgca tttcaacatt ctcagtaggg ccagacc 597

<210> 327
<211> 597
<212> DNA
<213> Enterococcus gallinarum

<400> 327
ctcttcgagg tgcgcaagga gttatgctag atattgatca aggaacatat ccgttcgtaa 60
catcctcaaa tccagtagct ggtggagtaa ccattggtag tggagtgggt ccttctaaaa 120
tcaataaagt agttggtgtt tgtaaagcat atacttcaag agttggtgac ggcccattcc 180
caacagaact ttttgatgaa acaggcaatc aaattcgtga agttggccgt gaatatggta 240
cgacaactgg tcgtccacgt cgtgttggtt ggtttgactc tgttgatcatg cgtcattcaa 300
aacgtgtttc tggatcacg aatctgtctt taaattcaat tgatgttttg agcggcttgg 360
aaactgtaaa aatttgtaaa gcttatgaat tagatggaga attgatttat cattatcctg 420
caagtctaaa agaattgaat cgttgtaaac cagtctatga agagttacca ggctggtcag 480
aagatattac tggatgcaaa acattagctg atcttcctga aaatgcacgt aactatgtac 540
atcgtatctc tgaattagtt ggggttcgta tctcaacatt ctcagtaggt cctgacc 597

<210> 328
 <211> 598
 <212> DNA
 <213> *Enterococcus flavescens*

<220>
 <221> misc_feature
 <222> (594)..(594)
 <223> n is a, c, g, or t

<400> 328
 ctttttgaag gtgctcaagg cgtgatgctg gatatcgacc aaggaaccta tcctttcgtg 60
 acatcatcca accccgttgc tgggggagtc actattggtg gtggtgtggg tccttcaaaa 120
 atcaacaaag tcgttggtgt ctgcaaagct tacacctctc gggtaggaga tggtcctttc 180
 coaacggaac tgtttgatga aacagggtgaa caaatccgta agatcggtcg tgaatacggg 240
 acaacgacag gacgtcctcg ccgtgtgggc tggtttgata ccgtcgtgat gcgccattca 300
 aaacgtgttt cagggattac aaacctatcc ctttaactcga tcgatgtctt gagcggctta 360
 gaaaccgtga agatctgtac ggcttatgaa ctagacggcg aattgatcta tcattaccca 420
 gcaagcttga aagagttgaa ccgctgcaaa ccagtctacg aagaacttcc tggctgggtct 480
 gaagacatta ctggctgcaa aacattagca gatctgccag aaaatgcacg caattacggt 540
 caccgcatct ctgaattagt cgggtgtccgc atttcgacct tctcagtagg gccngacc 598

<210> 329
 <211> 598
 <212> DNA
 <213> *Streptococcus agalactiae*

<220>
 <221> misc_feature
 <222> (581)..(581)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (591)..(591)
 <223> n is a, c, g, or t

<400> 329
 ctctttgaag ggcgcaagga gttatgctcg acattgatca aggaacatac ccatttgtaa 60
 catcttccaa tccagtagca ggtggtgtca caattgggtc gggagttgga ccaagtaaaa 120
 ttaataaagt agtaggtgta tgtaaagctt acactagccg tgttggtgat ggaccattcc 180

caacagaact ttttgatgag gttggtgacc gtattcgtga gattggtaaa gagtatggta	240
caacgaccgg tcgtcctcgt cgcgttggat ggtttgattc tgttgttatg cgtcacagcc	300
gtcgagtatc aggtattact aacctctctc tgaattcaat tgatgttctt tcagggttg	360
atacggtgaa aatttggtg gcttatgacc ttgatgggaa acgtattgac tattaccag	420
caagccttga acagctaaaa cgttgtaaac caatctatga agaattaccg ggctggctg	480
aagatattac agcttgctg agcttagatg atcttcaga aaatgcacgt aattacgttc	540
gccgtgttg cgaattggtt ggtgttcgta tttctacttt nctcagtagg nccaggtc	598

<210> 330
 <211> 599
 <212> DNA
 <213> Streptococcus sanguis

<400> 330	
ctttttgaag gggctcaagg agttatgctc gacattgatc aaggaacata cccatttgta	60
acatcttcca atccagtagc aggtggtgct acaattggtt cgggagttgg accaagtaaa	120
attaataaag tagtaggtgt atgtaaagct tacactagcc gtgttggtga tggaccattc	180
ccaacagaac tttttgatga ggttggtgac cgtattcgtg agattggtaa agagtatggt	240
acaacgaccg gtcgtcctcg tcgcgttggg tggtttgatt ctgttggtat gcgtcacagc	300
cgtcgagtat caggatttac taacctctct ctgaattcaa ttgatgttct ttcagggtt	360
gatacggatga aaatttggtt ggcttatgac cttgatggga aacgtattga ctattacca	420
gcaagccttg aacagctaaa acgttgtaaa ccaatctatg aagaattacc gggctggtct	480
gaagatatta cagcttgctg tagcttagat gatcttcag aaaatgcacg taattacgtt	540
cgccgtgttg gcgaattggt tgggtgtcgt atttctactt tctcagttgg gtccagacc	599

<210> 331
 <211> 598
 <212> DNA
 <213> Enterococcus faecium

<220>
 <221> misc_feature
 <222> (581)..(581)
 <223> n is a, c, g, or t

<400> 331	
ttcttcgaag gggcgcaagg gggtatgctg gatattgacc aagggactta tccatttgta	60

acttcttcta atccagttgc aggggagtca ccatcggttc cgggtgttggc ccgagcaaaa	120
ttgacaaggt agttggtgtc tgcaaggcct acaccagtcg ggtcgggagat ggaccattcc	180
caacagagct ttttgatgaa gttggtgacc gcattcgtga tatcggccac gaatatggca	240
ctaccactgg tcgcccacgt cgggtaggtt ggtttgactc ggttgttatg cgccatagcc	300
gccgtgtatc agggattacc aatctttcgc ttaactccat cgatgtcttg agtgggtctgg	360
atacagtga aatctgtgta gcttatgact tggatggcca aagaatcgac cactaccag	420
ctagtctgga acagctcaag cgctgcaagc cgatttacga agagctgcca ggctggtcag	480
aggacatcac tggagtccgc agtctggaag acttgccaga aaatgcccg aactatgttc	540
gccgagtga tgagctggtt ggcgttcgca tttctacctt nctcagtagg gccagacc	598

<210> 332
 <211> 598
 <212> DNA
 <213> *Enterococcus durans*

<400> 332	
ctctttgaag gggcacaagg tgtgatgttg gatatcgatc aaggaacgta tccatttgtg	60
acttcttcta atccggtagc tgggtggtgta acgatcggta gtggcggttg cccttcaaag	120
atcaataaag tcgttggtgt atgtaaagct tatacttctc gtgtaggaga tggcccattc	180
ccaacagaac tatttgacga aacagggtcaa caaatccgtg aagtcggtcg tgaatatggt	240
acgacaacag gtcgacctcg tcgtgtcggc tggtttgata cagtcgtggc gcgccattca	300
aaacgtgtat caggaatcac taacctatca ttgaattcaa tcgatgtatt aagcggacta	360
gaaacagtaa aaatctgtac agcgtatgaa ttagatggag aattgatcta tcattacca	420
gcaagcctga aagaattgaa acgttgcaaa ccagtatacg aagaacttcc tggttggtct	480
gaagatatta cagcatgtaa aacacttgct gaactaccag aaaacgcccg taactatgtt	540
agacgtatct cagagcctgt aggagtcctg atttcaacat tctcagtagg tccagacc	598

<210> 333
 <211> 597
 <212> DNA
 <213> *Streptococcus pyogenes*

<400> 333	
ctatttgaag gggcacaagg ggttatgctt gatattgacc aggaacgtac ccatttgtaa	60
cgtcttcaaa ccagttgct ggtggtgtaa ccattgggtc tgggtgttggc ccaaataaaa	120
tcaacaaagt agttggtgtc tgtaaagcct acacaagccg tgtcggtgat gggccattcc	180

ctacagaact ctttgatgaa gtgggtgagc gcattcgtga agtgggtcat gaggtaggga	240
caacgaccgg ccgtccacgt cgtgtcgggt ggtttgattc ggtagtcatg cgccacagtc	300
gtcgtgtatc aggtattact aacctctctc tgaattcaat tgatgttctt tcagggttg	360
atacgggttaa gatttgtgtg gcttatgacc ttgatgggaa acgtattgac tattaccag	420
caaaccttga acaactcaaa cgttgcaaac caatctatga agaattacca ggctggcaag	480
aggacatcac aggtgttcgt agccttgatg agcttcctga aaatgcccgc aactacgttc	540
gtcgtgttgg agaattggtt ggcgttcgca tttcaacctt ctcagttggg ccagacc	597

<210> 334
 <211> 599
 <212> DNA
 <213> Streptococcus pneumoniae

<400> 334	
ctatttgaag gggctcaagg tggtatgcta gatatcgacc aaggtagtta tccatttgtt	60
acgtcatcaa accctgtagc tggtaggtgt acaattgggt ctggtgtcgg tccaagcaag	120
attgacaagg ttgtaggtgt atgtaaagct tatacgagtc gtgtaggaga tggctccttc	180
ccaactgagt tgtttgatga agtgggagaa cgtatccgtg aagtgggtca tgaatatggt	240
acaacaactg gtcgtccacg tcgtgtaggt tggtttgact cagttgtgat gcgtcatagc	300
cgtcgtgttt ctggtattac taacctttct ttgaactcta ttgatgtttt gagcggtttg	360
gatactgtga aaatctgtgt ggcctatgat cttgacggtc aacgtattga ctactatcca	420
gctagtcttg agcaattgaa acgttgcaag cctatctatg aagagttgcc aggttggtca	480
gaagatatta ccggagttcg caatttgga gatcttcctg agaatgcgcg taactatggt	540
cgtcgtgtga gtgaattggt tggcgttcgt atttctactt ttctcagtag gtccaggcc	599

<210> 335
 <211> 598
 <212> DNA
 <213> Streptococcus oralis

<400> 335	
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acttcttcaa accctgtcgc tggtaggtgt acgattgggt ctggtgttgg tccaagtaag	120
attgacaagg ttgtaggtgt ctgtaaagcc tacacaagtc gtgtaggaga tggaccgttc	180
ccaactgaat tatttgatga agtgggagat cgcacccgtg aagtaggtca tgaatatggt	240

acaacaactg gtcgtccacg tcgtgtgggt tggtttgact cagttgtgat gcgtcacagc 300
 cgccgtgtat ctgggattac caatctttca ttgaactcta tagatgtttt gagtggtttg 360
 gatactgtga aaatctgtgt cgcctatgat cttgatggtc aacgtattga ttactatcct 420
 gctagtcttg agcagttgaa acgttgtaag ccaatctacg aggaattgcc aggttggtca 480
 gaagacatca ctggagtcg taatttgaa gaccttcctg agaatgcacg caactatggt 540
 cgtcgtgtaa gcgagttggt tgggtgtcgt atctcaactt tctcagttgg gccagatc 598

<210> 336
 <211> 598
 <212> DNA
 <213> *Staphylococcus hominis*

<400> 336
 ctctttgaag gagcgcaagg agttatgtta gatatcgacc atggtacata tccttttgta 60
 acgtcaagta atcctgtggc aggtaatgtg acagtaggaa ctggcgtggg tccaaccttc 120
 gtatctaaag tgattgggggt atgtaaatcc tatacatctc gtgtaggtga cggcccattc 180
 cctactgaat tattcgacga agatgggcat catattagag aagtaggtcg tgaatatgga 240
 acgacaacag gacgtcctcg tcgtgtaggt tggttcgact cagttgtatt acgtcactct 300
 cgtcgtgtaa gtggtattac agacttatct attaactcaa ttgacgtttt aacaggttta 360
 gatacggtta aaatttgtag agcttatgag ttagatgggtg aaacaatcac agaatatcca 420
 gcaaaacttag accaattacg tcgttgtaaa ccaattttcg aagagttacc tggttggacg 480
 gaagacatta caggttgtcg tacattagaa gaattacctg aaaacgcacg taaatactta 540
 gaacgtattt ctgaattatg tggcgttcat atttcaatct tctcagtagg tccaggcc 598

<210> 337
 <211> 598
 <212> DNA
 <213> *Bacillus anthracis*

<400> 337
 ctatttgaag gtgctcaagg tggtatgctt gatatcgacc acggtacgta cccgttcggt 60
 acatcttcta acccaattgc tgggtggtgta acagttggaa ctggagttgg tcctgcgaaa 120
 gttactcgcg ttgtaggtgt atgtaaagca tatacaagcc gcgttggtga tgggccattc 180
 cctactgagc ttcattgacga aattgggcat caaattcgtg aagttgggtcg tgagtatgga 240
 acgacaactg gtcgtccacg ccgcgtaggt tggttcgata gcgttggtgt aagacatgca 300
 cgtcgtgtta gtggtttaac agatttatca ttaaactcta tcgacgttct aactgggtatt 360

ccaacactta aaattttgtgt tgcttacaaa tgcgatggga aagttatcga tgaagttcca	420
gcaaacttaa acatttttagc gaaatgtgag cctgtatacg aagagcttcc aggttggaca	480
gaagatatta ctggtgtaag atcattagat gagcttcctg aaaatgctcg aaaatacgta	540
gaacgtgttt ctgagttaac aggagttcaa ttatctatgt tctcagtagg gccagacc	598

<210> 338
 <211> 562
 <212> DNA
 <213> *Bacillus cereus*

<220>
 <221> misc_feature
 <222> (4)..(4)
 <223> n is a, c, g, or t

<400> 338	
gacncggtac gtaccggttc gttacatctt ctaaccaat tgctgggtgg gtaacagttg	60
gaactggagt tggctcctgcg aaagttactc gcgttgtagg tgtatgtaaa gcatatacaa	120
gccgcgttgg tgatgggtcca ttccctactg agcttcatga tgaaattggg catcaaattc	180
gtgaagttgg tcgcgagtat ggaacgacaa ctggtcgtcc acgccgcgta gggtgggttcg	240
atagcgttgt tgtaagacat gcaogtcgtg ttagtggttt aacggatcta tcattaaatt	300
ctatcgacgt tttaacaggt attccaactc ttaaaatttg tgtagcttac aaatacaatg	360
gcgaagttat tgatgaagtt ccagctaact taaacatttt agcgaaatgt gagcctgtat	420
atgaagagct tccaggttgg gaagaagata ttactgggtgt aaaatcatta gatgaacttc	480
ctgaaaatgc acgaaaatac gtagaacgtg tttctgagtt aacaggaatt caaatatcta	540
tgttctcagt aggtccccac ca	562

<210> 339
 <211> 598
 <212> DNA
 <213> *Bacillus megatherium*

<400> 339	
ctattcgaag gggcacaagg tgttatgtta gatatcgatc aaggaacata tccatttggt	60
acatcttcaa acccagtagc gggtaggagta acaattgggt ctggggtagg tccatctaaa	120
atcaaacacg ttgtaggtgt atcaaaagcg tatacaactc gtggttggtga cggccctttc	180
ccaactgaat taacaaacga aatcgggtgat caaatccgtg aagtaggacg tgaatatggt	240

acaacaactg gtcgtcctcg ccgtgtaggt tggttcgaca gtgtagttgt acgtcatgct	300
cgtcgcgtta gtggaatcac agatctatct ttaaactcaa ttgatgtatt aacgggaatt	360
gagacattaa agatttgcgt agcttatcgt tataaagggg aagttatgga agaattccct	420
gctagcttaa aaacacttgc agagtgcgaa cctgtatatg aagagcttcc aggttgga	480
gaagatatta cgggtgtgaa aacattagat gagttacctg ataacgctcg ccactactta	540
gagcgcgtgt ctcaattaac aggtattcct ttatctatct tctcagtagg tccaggcc	598

<210> 340
 <211> 598
 <212> DNA
 <213> Enterococcus casseliflavus

<220>
 <221> misc_feature
 <222> (11)..(11)
 <223> n is a, c, g, or t

<400> 340	
tattcgaagg nagctcaagg cgtgatgctg gatatcgacc aaggaaccta tcctttcgtg	60
acatcatcca acccgttgc tggaggtgct accatcggtg gtggtgtggg tccttcaaaa	120
atcaacaaag tcgttggtgt ctgcaaagct tacacctctc gggtaggaga tggtcctttc	180
ccaacggaac tgtttgatga aacaggtgaa caaatcgtg agatcggtcg tgaatacgga	240
acaacgacag gacgtcctcg ccgtgtgggc tggtttgata ccgtcgtgat gcgccattca	300
aaacgggtct cagggatcac gaatctatcc cttaactcga tcgatgtctt gagcggctta	360
gaaaccgtga agatctgtac ggcttatgaa ctagacggcg aattgatcta tcattaccca	420
gcaagcttga aagagttgaa ccgctgcaaa ccagtctacg aagaacttcc tggctgggtct	480
gaagacatta ctggctgcaa aacattagca gatctgccag aaaatgcacg caattacggt	540
caccgcctct ctgaattagt cgggtgtccgc atttcgacct tctcagtagg tccagacc	598

<210> 341
 <211> 598
 <212> DNA
 <213> Enterococcus raffinosus

<400> 341	
ctatttgaag gtgctcaagg cgttatgctg gatattgatc aaggaaccta tccatttggt	60
acttcttcga acccagttgc cgggtggggtg actatcggtg gtggtgtagg acctgctaaa	120
atcgacaaaag ttgtcgggtg ttgtaaagcc tatacttcac gcgtaggtga tggacctttc	180

ccaactgaat tgtttgatga agttggagat cagattcgtg aagtcggtcg tgaatatgga	240
acgactactg gtcgtccacg tcgtgtgggc tggtttgact cggttgtgat gcgtcattca	300
aaacgtgttt ctgggattac gaatctttct ttaaactcga ttgatgtctt gagcggctctg	360
gatacagtga aaatttgtac agcgtatgag ctggacggag aactaattta ccattatcca	420
gcaagcctaa aagaattaaa tcgttgtaag cccgtttatg aagaactacc tggttggagc	480
gaagatatta caggctgccg tgatttagct gatctaccgg aaaatgcgcg taattatgta	540
cgtcgcgttt ctgaacttgt ggggtgtgcgt atctcgacct tctcagttgg tcctggtc	598

<210> 342
 <211> 598
 <212> DNA
 <213> *Staphylococcus aureus*

<400> 342	
ctatttgaag gggcacaagg tgtaatgtta gatatcgacc atggtacata tccattcggt	60
acatcaagta atccaattgc aggtaacgtt actgttggtta cagggtgtagg tcctacattc	120
gtttcaaagg taattgggtgt atgtaaagct tatacatcac gtgttggtga tgggccattc	180
cctactgaat tattcgatga agatggacat catattagag aagttggtcg tgaatatggt	240
acaacaacag gacgtccacg tcgtgtaggt tggtttgatt cagttgtatt acgtcactct	300
cgtcgtgtaa gtggtattac agatttatct attaaactcaa tcgatgtttt aacaggccta	360
gacacagtga aaatctgtac agcttatgaa ttagacggta aagaaattac tgagtaccca	420
gcaaacttag atcaattaaa acgttgtaaa ccaatctttg aagagttacc aggttggaca	480
gaagacgtaa caagtgtgcg tacttttagaa gaattacctg aaaatgcacg taaatattta	540
gagcgtattt cagaattatg taatgtacaa atttctatct tctcagtagg tccaggcc	598

<210> 343
 <211> 598
 <212> DNA
 <213> *Staphylococcus epidermidis*

<400> 343	
ctcttcgaag gtgctcaagg tgtcatgtta gatatcgacc atggtacata tccattcggt	60
acatctagta atccagttgc aggtaacgtt acagtaggta cagggtgttg ccctacatca	120
gtgtctaaag tgattgggtgt atgtaaatca tatacatctc gtgtaggtga cgggccattc	180
ccaactgaac tttttgatga agatggccac catattagag aagtgggtcg tgaatatggt	240

acaactactg gacgtccacg tcgtgtaggt tggttcgact cagttgtatt acgtcattca 300
 cgtcgtgtaa gtggtatcac agatctttca attaactcaa tcgacgtttt aacaggatta 360
 gacacagtta aaatttgtag tgcttacgaa ttagatggtg aaaaaattac tgaataccca 420
 gcaaacttag atcaattaag acgttgtaaa cctatcttcg aagagcttcc aggttggact 480
 gaagacatta caggttgtag tagtttagat gaacttctcg agaatgcacg taattactta 540
 gagcgtattt cagaattatg cggtgtccat atttcaatct tctcagtagg tcctgggc 598

<210> 344
 <211> 567
 <212> DNA
 <213> *Streptococcus mitis*

<220>
 <221> misc_feature
 <222> (11)..(11)
 <223> n is a, c, g, or t

<400> 344
 tatggctagc natagaccaa ggtacgtatc catttggtac gtcacaaac cctgtggctg 60
 gtggtgttac gattggttct ggtgttggtc caagtaagat tgacaagggt gtaggtttat 120
 gtaaagccta tacgagtcga gtaggagacg gtcctttccc aactgaattg tttgatgaag 180
 tgggagaacg tatccgtgaa gttggtcatg aatatggtac aacaactggt cgtccacgtc 240
 gtgtgggttg gtttgactca gttgtgatgc gtcatagtcg tcgtgtttct ggtattacta 300
 atctttcatt gaactctatc gatgttttga gtggtttaga tacagtgaag atctgtgtgg 360
 cctatgatct tgatgggtcaa cgtattgact actatccagc tagtcttgag caattgaaac 420
 gttgcaagcc tatctatgaa gagttgccag gttggtcaga agatattact ggagttcgta 480
 atttggaaga tcttctgag aatgcgcgta actatgttcg tcgtgtgagt gaattggttg 540
 gcgttcgtat ttctactttc tcagtag 567

<210> 345
 <211> 572
 <212> DNA
 <213> *Streptococcus species*

<400> 345
 atggcttgct attgaccaag ggtacatacc catttgtaac atcatctaac ccagtcgctg 60
 gtggtgtaac aatcggttct ggtgttggtc caagtaaaat caacaaagtt gtcggtgtat 120
 gtaaagccta cacaagccgt gttggtgacg gaccattccc aactgaactt ttagacgaag 180

ttggtgaccg catccgtgaa gtgggtcacg aatatgggac aacaactgga cgtccacgtc	240
gtgttggttg gtttgactca gttgttatgc gtcacagccg ccgcgtatca ggtatcacia	300
acttgctact taactcaatt gacgttcttt caggtcttga tacggtcaaa atctgtgtgg	360
catacgacct tgacggtcaa cgtatcgacc actaccagc aagccttgaa caattgaaac	420
gttgtaaacc aatctacgaa gaattgccag gttggtcaga agacatcaca ggttgccgta	480
gcctagatga acttcccgaa aatgctcgtg actacgttcg ccgtgttggt gaactcgttg	540
gtgttcgcat ttcaacattc tcagttggcc cc	572

<210> 346
 <211> 571
 <212> DNA
 <213> Streptococcus canis

<220>
 <221> misc_feature
 <222> (9)..(9)
 <223> n is a, c, g, or t

<400> 346	
tggcttgcnatcgaccaagg taacttacct atttgttact tcttcaaacc cagttgctgg	60
tggggtaaca atcggttcag gtgttggtcc aagcaagatc aataaagttg tcggtgtatg	120
taaagcttac acaagccgtg ttggtgacgg tccgttccca acagaacttc tagatgaagt	180
tggagatcgt atccgtgaaa ttggtcacga atatggtaca acaactggac gtccacgtcg	240
tgttggttgg tttgactcag ttgttatgcg tcacagccgc ccgcgtatcag gtatcacaaa	300
cttgtcactt aactcaatcg atgttctttc aggacttgat actgttaaaa tctgtgtggc	360
at'acgacctt gacggtcaac gtatcgacca ctaccagca agtcttgaac aattgaaacg	420
ttgtaaacca atctacgaag aattgccagg ttggtcagaa gacatcacag gttgccgtag	480
cctagatgaa cttcccgaaa atgctcgtga ctacgttcgc cgtgttggtg aactcgttgg	540
tgttcgcatt tcaacattct cagttggccc c	571

<210> 347
 <211> 573
 <212> DNA
 <213> Streptococcus mutans

<220>
 <221> misc_feature

<222> (11)..(11)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (567)..(567)
 <223> n is a, c, g, or t

<400> 347
 tatggcttgc nattgaccaa ggtaacctat ccatttgtaa cttcatcaaa tccagttgca 60
 ggtggcggtta ccatcggtac tgggtgttga ccaagtaaaa tcaataaggt tggtgggtgac 120
 tgcaaagcct ataccagccg tgtaggtgat ggtcctttcc ccacagaact ttttgaccaa 180
 acgggagagc gcattcgtga agttgggcat gaatacggga caacaacagg gcgtccgcgt 240
 cgagttgggtt ggtttgactc agttgttatg cgtcacagcc gccgtgtatc aggcattacc 300
 aatttatctc ttaactgtat tgatgtactt tcaggtcttg atatcgtaaa aatctgtgta 360
 gcctatgatt tggatggaaa acggattgat cactaccctg ccagtctcga acaactcaaa 420
 cgctgtaaac ctatttatga agaattgccg ggctgggtctg aagatattac aggggttcgc 480
 agtttagaag atcttcctga aaatgctcgt aattatgtcc gccgtgtaag tgaattagtt 540
 ggtgttcgta tttctacttt ctcagtngtc ccc 573

<210> 348
 <211> 572
 <212> DNA
 <213> Streptococcus gordonii

<400> 348
 taatgctagc aattgaccaa ggtacctatc catttgtaac ctcatctaata ccagttgctg 60
 gtgggtgtaac gatcggttct ggtgtgggtc ctagcaagat tgacaaagta gtgggtgttt 120
 gtaaagccta tacaagtcgt gttgggtgatg gtcctttccc aacagagctt ttcgatgaag 180
 taggtgaccg cattcgtgag gttgggtcatg agtatggtac aacaacagga cgtccgcgtc 240
 gagttggttg gtttgactct gttgttatgc gccatagccg ccgtgtatct gggattacca 300
 atctttcgtc taactctatc gatgttttga gcggtctgga tacagtcaag atctgtgtag 360
 cctatgattt ggatggccaa agaatcgacc actatccagc tagtttgga cagcttaaac 420
 gttgtaagcc gatttacgaa gagcttcctg gatgggtctga agatattact ggcggttcgta 480
 agttagaaga tcttcagaa aatgctcga actatgttcg gcgagtaagc gagttgggtg 540
 gtgtacgtat ttccaccttc tcagttggcc cc 572

<210> 349
 <211> 571
 <212> DNA
 <213> *Bacillus species*

<220>
 <221> misc_feature
 <222> (18)..(18)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (565)..(565)
 <223> n is a, c, g, or t

<400> 349
 tatggcttgc aattgacnCG gtacgtacCC attcgTtaca tcttctaacc cgattgcggg 60
 tgggtgtaaca gttggaactg gagttggtcc tgcgaaagtt actcgcgTtg taggtgtatg 120
 taaagcatat acaagccgtg ttggtgacgg tccattccct actgaactta atgatgaaat 180
 tggTcatcaa attcgTgaag ttggtcgTga gtacggaaca acaactggTc gtccgcgCCg 240
 cgtaggtTgg ttcgatagcg ttgttgtaag acatgcgcgt cgtgttagtg gtttaacgga 300
 tctatcatta aattctatcg acgttttaac agatattccg actcttaaaa tttgtgtTgc 360
 ttacaaatac aatggcgaag ttatcgatga agttccagca aacttaaaca ttttagcaaa 420
 atgtgagcct gtatatgaag agcttccagg ttggacagaa gatattactg gtgtaaaatc 480
 attagacgag cttcctgaaa atgcacgaaa atacgtagaa cgtgtttctg agttaacagg 540
 aattcaatta tctatgtTct cagTngtccc c 571

<210> 350
 <211> 574
 <212> DNA
 <213> *Bacillus pumilus*

<220>
 <221> misc_feature
 <222> (570)..(570)
 <223> n is a, c, g, or t

<400> 350
 gttatggctt gctattgatc aagggaCata tccatttgtc acgtcatcta acccagtagc 60
 tggaggagtG acgattggTt ctggcgtagg accaacaAAA attcaacatg tggTcggcgt 120
 gtcaaaagcg tacacaacac gtgttgGaga tggcccatTc ccgacagaac tccatgatga 180
 aattggcgat caaatccgtg aggttgGccg tgaatacggt acaacaactg gacgtccgcg 240

ccgtgttggc tggtttgaca gtgtcgttgt ccgtcatgct cgacgtgtga gcgggattac 300
agatctatct cttaactcaa ttgatgtact gacagggatt gaaacattga aaatctgtgt 360
cgcttataaa ttgaacggag aaatcacaga ggaattccca gcaagtctaa atgaactagc 420
gaaatgtgag cctgtctacg aagaaatgcc aggatggaca gaggatatta caggcgtgaa 480
gaatttaagc gaactgcctg aaaatgcccg tcattattta gagcgcattt cacaattaac 540
aggattacca ctttccattt tctcagttgn cccc 574

<210> 351
<211> 560
<212> DNA
<213> Enterococcus villorum

<220>
<221> misc_feature
<222> (557)..(557)
<223> n is a, c, g, or t

<400> 351
tatcgaccag ggacatatcc atttggtact tcttccatcc agtagcaggt ggtgtaacaa 60
ttggtagtgg cgttggtcca tctaaaatta ataaagtcgt cggagtatgt aaagcttata 120
cttctcgtgt tggagatggc ccgttcccta cagaattatt tgatgaaaca gggcaacaaa 180
tacgtgaagt aggtcgtgaa tatggcaca caacaggctg tccacgacga gttggatggt 240
ttgatacggg tgttatgcgc cattcaaaac gtgtatcagg tattacaaat ttatctctta 300
attcgattga tgtattaagc ggattagaaa cagtaaaaat ttgtacggcc tatgaactag 360
atgggtgagct gatttatcat taccagcaa gtttgaaaga attgaaacgt tgtaaaccag 420
tatatgaaga actacctgga tgggtctgaag atattacgaa atgcaagaca ctttctgaat 480
tgccagaaaa tgcacgtaac tatgtaagac gtatttctga gcttgtaggt gtacgcatct 540
ccacatttct cagtggnccc 560

<210> 352
<211> 563
<212> DNA
<213> Bacillus thuringensis

<220>
<221> misc_feature
<222> (2)..(2)
<223> n is a, c, g, or t

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<220>
<221> misc_feature
<222> (555)..(555)
<223> n is a, c, g, or t

<400> 352
cncggtacgt acccggttcgt tacatcttct aacccgattg cgggtggtgt aacagttgga      60
actggagttg gccctgcgaa agttactcgc gttgtaggtg tatgtaaagc atatacaagc      120
cgtggttggtg acggtccatt ccctactgaa cttaatgatg aaattggtca tcaaattcgt      180
gaagttgggtc gtgagtagcg aacaacaact ggtcgtccgc gccgcgtagg ttggttcgat      240
agcggttggtg taagacatgc gcgtcgtggt agtggtttta cggatctatc attaaattct      300
atcgacgttc taacagatat tccaactctt aaaatttggt ttgcttaca atacaatggc      360
gaagttatcg atgaagttcc agcaaactta aacatttttag cgaaatgtga gcctgtatat      420
gaagagcttc caggttggac agaagatatt actggtgtaa aatcattaga cgagcttcct      480
gaaaatgcaa gaaaatacgt agaacgtggt tctgagttaa caggaattca attatctatg      540
ttctcagtg ccccnngggcc cca                                              563

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<210> 353
<211> 555
<212> DNA
<213> Bacillus mycoides

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<220>
<221> misc_feature
<222> (4)..(4)
<223> n is a, c, g, or t

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<220>
<221> misc_feature
<222> (548)..(548)
<223> n is a, c, g, or t

```

```

<400> 353
ggtncgtacc cattcgttac atcttctaac ccgattgctg gtggtgtaac agttggaact      60
ggagttgggtc ctgcgaaagt tactcgcggt gtaggtgtat gtaaagcata tacaagccgt      120
gtaggtgatg gtccgttccc tactgagctt catgatgaaa ttggatcatca aattcgtgaa      180
gttggtcgtg aatacggaac aacaactggt cgtccacgcc gcgtaggttg gttcगतatgc      240
gttggtgtaa gacatgcacg tcgtgttagt ggtttaacag atctatcatt aaattctatc      300
gacgttctaa caggtattcc aactcttaaa atttgtgttg cttacaaata caatggcgaa      360

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gttatcgatg aagttccagc aaacttaaac attttagcga aatgtgagcc tgtatatgaa	420
gagcttccag gttggacaga agatattact ggtgtaagag cattagacga gcttcctgaa	480
aatgcacgaa aatacgtaga acgtgtttct gagttaacag gaattcaatt atctatgttc	540
tcagtgncc cccgg	555

<210> 354
 <211> 581
 <212> DNA
 <213> Bacillus weihennstephanensis

<220>
 <221> misc_feature
 <222> (8)..(8)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (14)..(14)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (473)..(473)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (564)..(564)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (576)..(577)
 <223> n is a, c, g, or t

<400> 354	
tttttttngg aagngcgcaa ggtgttatgc ttgatatcga ccacggtaag taccogttcg	60
ttacatcttc taacccaatt gctggtggtg taacagttgg aactggagtt ggtcctgcga	120
aagttactcg cgttgtaggt gtatgtaaag catatacaag ccgtgttggt gatgggccat	180
tcctactga acttaatgat gaaatcggtc accaaattcg tgaagttggt cgtgaatacg	240
gaacaacaac gggtcgtcca cgccgtgtag gttggttcga tagcgttggt gtaagacatg	300
cagtcgtgt tagtggttta acagatttat cattaaactc tatcgatgta ttaacaggta	360
ttccaactgt taaaatttgt gttgcttaca aatgcaatgg cgaagttatc gatgaagttc	420
cagctaactt aaacatttta gcgaaatgtg agcctgtata tgaagagctt ccnggttgga	480

cagaagatgt tactgctgtg aaatcattgg atgagcttcc tgaaaatgca agaaaatacg 540
tagagcgtgt tttctgaatt aacnggaagc caattnncaa g 581

<210> 355
<211> 572
<212> DNA
<213> Staphylococcus haemolyticus

<400> 355
caaggtgtca tgtagatat cgaccatggg acatatacctt tcgtaacttc aagtaaccct 60
gttgcaggta atgtaacagt tggtagcagg gtaggcccaa ctttcgtatc taaagtgatt 120
gggtgtatgta aagcatatac atctcgtgta ggcgatgggc cattccctac agaattatct 180
gatgaaaatg gacatcatat tagagaagtt ggtcgtgaat acggtacaac aacaggacgt 240
ccacgtcgtg taggttggtt tgactcagtt gtattacgtc actctcgtcg tgtagtggt 300
attacagact tatctattaa ctctatcgac gtacttacag gtcttgatac agtgaagatt 360
tgtactgctt acgaattaga tggagaagaa attacagaat atcctgctaa cttagatcaa 420
ttacgtcgtt gtaaaccaat ctttgaagag ttaccaggat gggaagaaga tatcactggt 480
tgccgtacat tagaagaatt accagataac gcacgtaaat acttagaacg catttctgaa 540
ttatgtaatg tacgtatttc aatcttctca gt 572

<210> 356
<211> 578
<212> DNA
<213> Staphylococcus saprophyticus

<400> 356
gcaaggtgtg atgttagata tcgaccatgg tacatatcca ttcgttcatc aagtaaccca 60
gttgcaggta atgtgactgt cggtggcggg gtaggtccaa cattcgtctc taaagttatc 120
gggtgtgtgta aagcctatac atcacgtgtc ggcgatgggc cattcccaac agaactatct 180
gacgaagatg ggcaccacat ccgtgaagta ggtcgtgaat acggtacaac aacaggacgt 240
ccacgtcgtg taggttggtt cgactcagtt gtattacgtc attctcgtcg tgcaagtggg 300
attacagatt tatctattaa ctcaattgat gtattaacag gccttaaaga agttaaatac 360
tgtactgctt atgagttaga cggtaaagaa attacggaat acccagctaa cttgaaagac 420
ttacaacgtt gtaagccaat ttttgaagaa ttaccagggt ggacagaaga tgtgacagg 480
tgtcgttcat tagaagaatt acctaataat gcgcgtagat acttagaacg tatttctgaa 540
ttatgtgacg tgaagatttc aatcttctca gttggccc 578

<210> 357
 <211> 583
 <212> DNA
 <213> *Bacillus subtilis*

<220>
 <221> misc_feature
 <222> (542)..(542)
 <223> n is a, c, g, or t

<400> 357
 ctcaaggggt tatgcttgat attgaccaag ggacataccc gtttgtcact tcatccaacc 60
 cggtcgccgg aggggtgacg atcggttcag gcgtaggccc gacaaaaatc cagcacgtcg 120
 tcggtgtatc taaagcgtac acaaccctg tcggtgacgg tcctttcccg actgagctga 180
 aagatgaaac cggggatcaa atccgtgaag tcggacgcga atacggcaca acgacaggcc 240
 gtccgcgccg tgtcggtggt tttgacagcg ttgttgtccg ccatgcccg cgcgtcagcg 300
 gaatcacaga tctttctctg aactcaatcg atgtgctgac tggcattgaa acattgaaaa 360
 tctgtgtcgc ttaccgctac aaagggaag tgattgaaga attcccgga agtctgaaag 420
 ctctgcgaga gtgtgaaccg gtatatgaag aaatgcctgg ctggacggaa gatatacacag 480
 gcgcaaaaac attaaagcat cttcctgaaa atgcgcgcca ttatctggaa cgcgtgtctc 540
 anctgacagg tattccgctt totattttct cagtaggtcc aga 583

<210> 358
 <211> 598
 <212> DNA
 <213> *Listeria monocytogenes*

<400> 358
 tttggaagg ggcgaagggt ttatgcttga tattgatcaa ggaacatata catttgtaac 60
 ttcaagtaac ccgattgctg gtggcgtaac tatcggtagt ggtgttggtc cttcaaaaat 120
 caatcatggt gttggtgtgg cgaaagctta tacaacacgt gttggtgatg gtcctttccc 180
 aacagaatta tttgattcta ttggtgacac tattcgtgaa gtcggtcatg aatatggtac 240
 aacgactggt cgtccgcgtc gtgtagggtt gtttgatagc gtagtggttc gtcattgcgcg 300
 tcgtgttagt ggattaacag atttatcgtt aacactactt gatgttttga caggaattga 360
 gacacttaaa atctgtgtag cttacaaatt agacggaaaa acaattacag agttcccagc 420
 aagtttgaaa gatttagctc gttgcgaacc tgtttatgaa gaacttcag gctggacgga 480

agatattact ggagttacat cactagatga tcttccagtg aactgccgcc attacatgga 540
gcgtatcgcc caacttacgg gagtgcaagt ttctatgttc tcagtaggtc ccagacca 598

<210> 359
<211> 573
<212> DNA
<213> Lactococcus lactis

<220>
<221> misc_feature
<222> (2)..(2)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (18)..(18)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (567)..(567)
<223> n is a, c, g, or t

<400> 359
tnatgcttga tattgacnag gaacataccc atttgtaact tctcaaacc agtagctggt 60
ggggtaacga ttggctctgg tgtgggtcca tcaaaaattt caaaagttgt tgggtgttgt 120
aaagcctata cttcacgtgt gggatgatgt ccattcccaa cagaactttt tgatgaagtt 180
ggacatcaaa ttcgtgaagt aggacatgaa tatggaacaa caacaggacg tccacgtcgt 240
gttggttgggt ttgactcagt cgtaatgcgt catgcaaac gtgtttcttg cttgacaaat 300
cttagcttga attcaattga cgttctctca ggacttgaaa cagtaaaaat ttgtgttgct 360
tacgaacgta gtaatggtga acaaattact cattatccag catcacttaa ggaattagca 420
gattgcaaac caatctatga agaattgcc ggatgggtctg aagatattac ttcatgccga 480
actttagaag agttaccaga agctgctcgt aactatgttc gtcggggttg tgaactagtt 540
ggcgtacgta tctcgacttt ctgagtngtc ccc 573

<210> 360
<211> 419
<212> DNA
<213> Bacillus anthracis

<220>
<221> misc_feature
<222> (4)..(5)

<223> n is a, c, g, or t

<220>

<221> misc_feature

<222> (407)..(407)

<223> n is a, c, g, or t

<400> 360

accnntttta cagacgtaaa atagataggt tatatgggtg gtataagtaa gatacttggt 60

cgttcatacg gtctgcagcc attgtgtatt gaattaagtc atttgttccg atagagaaga 120

aatcaacttc ttttgcgaaat tgatctgcta atactgctga agctgggatt tcaaccatca 180

taccaacttc aatagaatca gaaacagttg taccacttc tacaagtttc gctttttctt 240

ctaataagat cgcttttgct tgacggaact catcaagagt tgcaatcatt gggaacataa 300

tttttaagtt accgtatacg ctagcacgaa gtaatgcacg aagttgtgta cggaacacat 360

cttgctcatc aagacataag cgaattgcac ggtagcccaa gaacggnttc attctotta 419

<210> 361

<211> 445

<212> DNA

<213> *Bacillus cereus*

<400> 361

gccttcttta tgagcagcat cgataaccat ttttacaaga cgtaaaatag atggggtata 60

tggttggtat aagtatgata cttgttcggt catacgggtc gcagccattg tgtattggat 120

taaatcattt gttccgatag agaagaagtc aacttctttc gcgaattgat ctgctaatac 180

tgctgaagct gggatttcaa ccatcatacc aacttcaata gaatcagaaa cagttgtacc 240

cgcttctaca agtttcgctt tctcttctaa taaaatcgct ttcgcttgac ggaactcatc 300

aagagttgca atcattggga acataatttt taagttaccg tatacgctag cacgaagtaa 360

tgcacgaagt tgtgtacgga acacatcttg ctcacaaaga cataagcgaa ttgcacggta 420

tccaagaac ggatcattct cgtaa 445

<210> 362

<211> 445

<212> DNA

<213> *Listeria monocytogenes*

<220>

<221> misc_feature

<222> (436)..(436)

<223> n is a, c, g, or t

<400> 362
gccctcttta tgagaagcat caattacat ttttactaaa cgtaagatgg atggattgta 60
tggttggttaa aggtaagaaa cgcgttcggt catacgggtcc gcagccattg tatactgaat 120
taagtcattt gttccgatag agaagaaatc aacttctttt gcaaattgat cagcaagaac 180
tgcagcggca ggaatttcaa tcataattcc aagttcgatg gaatcagata cttctgttcc 240
agcagctttt agttttgctt tctcatctag taaaatatca cgtgcttgac ggaattcatt 300
tactgttgca atcatcgga acataatttt taagttacca tatacacttg cgcgaaagtaa 360
ggcgcggaagt tgcgtacgga ataattcttc attcgcaaaa caaagacgaa ttgcgcggaa 420
tccaagaac ggatcnttct cctta 445

<210> 363
<211> 444
<212> DNA
<213> Streptococcus pneumoniae

<220>
<221> misc_feature
<222> (423)..(423)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (425)..(425)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (442)..(442)
<223> n is a, c, g, or t

<400> 363
cgcgtgagct gctttgatcc attgttaatc aagcgtagga ttgatgggtt gtatgggttg 60
taaaggatatg aaacttggtc gttcatacgg tctgctgcca ttgtatattg gatcaagtca 120
tttgtaccaa ttgagaagaa gtcaacttct ttagcaaatt ggtctgcaag catagccgct 180
gcaggaatct cgatcatgat accaacttga atgttatccg caactgcaac accttcagca 240
agaagggttg ctttttcttc atcaaagact gctttcgctg cacggaattc tttcaagagc 300
gcaaccattg ggaacatgat acgcaattga ccgtgaacag acgcacgaag aagagcacgg 360
atttgtgtgc ggaacatagc atctccagtc tcagagatag agatacgaag agcacggaat 420
ccnangaacg gatccttttt cnta 444

<210> 364
 <211> 441
 <212> DNA
 <213> Streptococcus pyogenes

<220>
 <221> misc_feature
 <222> (419)..(419)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (431)..(431)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (436)..(436)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (439)..(439)
 <223> n is a, c, g, or t

<400> 364
 tgcgctgctt tgatacattg ttgatcaaac gtaatattga tgggttggtat ggttggtaaa 60
 ggtatgatac ttgttcgttc atacggctctg ctgccatagt gtattggata aggtcgtttg 120
 ttccaattga gaagaaatca acttccttag caaattggtc tgcaagcata gcagctgcag 180
 gaatctcaat catgatacca acttgatgt catcagcaac cgcaacgcct tctgcaagca 240
 agtttgcttt ttcttcgtca aagactgctt ttgcagcacg gaattcttta agaagcgcaa 300
 coattgggaa cataatacga agttgtccgt gaacagaggc acgaagaagc gcacgcattt 360
 gtgtgcggaa catggcatcc ccagtttcag agatggaaat acgaagagca cggaaaccna 420
 agaacggatc nttttncnt a 441

<210> 365
 <211> 440
 <212> DNA
 <213> Streptococcus agalactiae

<220>
 <221> misc_feature
 <222> (431)..(431)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature

<222> (438)..(438)
 <223> n is a, c, g, or t

<400> 365
 gagcagcttt gataacgttg ttaatcaaac gaaggattga tggattgtat ggttgataga 60
 ggtatgaaac ttgctcattc atacggtccg cagccattgt gtattggata agatcattag 120
 taccaattga gaagaaatca acttcttttg caaattggtc tgcaagcata gctgccgctg 180
 ggatttcaat cataatacca acttcaatgc cttcagctac tgctacaccg tcagctaaca 240
 agttcgcttt ctcttcttca aatatagctt tagcagcacg gaattcttta agcaaagcaa 300
 ccattgggaa catgatgcgt agctgtccat gaactgaagc acgaagaagt gctcggattt 360
 gtgtgcggaa cattgcatca ccagtttcag aaattgaaat acgcaatgca cggaatccca 420
 agaacggatc ntttttenta 440

<210> 366
 <211> 439
 <212> DNA
 <213> Streptococcus mutans

<400> 366
 tgagcagcct taacccatga tcaaccaagc gaagaatgga tggattataa ggttggtaga 60
 ggtatgatac ttgttcattc atacggtcag cagccatggt gtattgaata aggtcatttg 120
 taccgattga gaagaaatca acttccttag caaattggtc agccaacatt gcagctgcag 180
 gaatttcaat catgatacca acttgatat catctgaaac agcaacgcct tcagctttaa 240
 gattagcctt ttcttcttcc agaatacctt tagctttacg gaactcattg agcaaagcta 300
 ccattgggaa catgatacgc aactgaccat gaacagaagc acgcaaaagg gcacgcaact 360
 gtgtgcggaa catctgattg cctgtttctg agattgaaat acgaagtgca cgaaaaccaa 420
 agaacggatc attctctta 439

<210> 367
 <211> 445
 <212> DNA
 <213> Enterococcus flavescens

<220>
 <221> misc_feature
 <222> (436)..(436)
 <223> n is a, c, g, or t

<400> 367
 cgctcgtgtgc tgcatacaatt acatTTTTaa ttaaacgtaa gattgatggg ttgtatgggt 60

ggtataagta agaaacgcgt tcgttcatac ggtctgccgc cattgtgtat tggattaagt 120
 cgttgggtcc aacactaaag aagtctactt ctttggcaaa tttatcagct aatacggcag 180
 ctgctggaat ttcaatcata atacctactt ggatatcgtt tgaaacttca acaccttcgt 240
 tgactaattt ttgtttttcg tcttcaaaga ttgctttcgc tgctctaaat tctttcaaag 300
 tagcaaccat tgggaacatg atacgtaagt taccatgaac agacgcacgt aataatgcac 360
 gcatttgtgt acggaacatg ccgtcaccta gttctgataa gctaatacgt aatgcacggt 420
 aaccaagaa cggatnattc tcgta 445

<210> 368
 <211> 448
 <212> DNA
 <213> Staphylococcus aureus

<220>
 <221> misc_feature
 <222> (1)..(2)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (6)..(6)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (438)..(438)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (441)..(441)
 <223> n is a, c, g, or t

<400> 368
 nnccntctt atgtgacgct tcaataactt gtttaactaa acgtaagatt gaagggttat 60
 atggttggta tagatatgat acacgctctg acatacggtc agcagctaat gtgtattgaa 120
 ttaaatcatt tgtaccgata ctgaagaaat ctacttcttt agcaaagaca tcagctaatg 180
 ctgctgttgc aggtatctct accatgattc ctaattctat atcatccgaa atgtcatgac 240
 cttcattttt aagggtttct ttttcttcta ataatatagc ttttgcttct cttaaattcgt 300
 taattgttgc aaccattggg aacatgatat ttaacttacc ataaactgat gcacgtaata 360
 atgcacgtag ctgtgggtctg aaaatatctt gttgcgcaag gcataaacga atcgcacggt 420

aacccaagaa cggatccntt niccttaa

448

<210> 369
<211> 443
<212> DNA
<213> *Staphylococcus epidermidis*

<220>
<221> misc_feature
<222> (434)..(434)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (439)..(439)
<223> n is a, c, g, or t

<400> 369
cttctttatg agaagcttca ataacttggt taactaatcg taaaattgaa ggattatatg 60
gttgatataa gtatgaaact cgttcagaca tacggtcagc agctaattgtg tattgaatta 120
agtcattcgt tcctatacta aagaaatcta cttcttttagc aaatacatca gcaagtgccg 180
cggtagctgg aatttcaacc ataataccta attcaatatc atctgaaact tcgtaacctt 240
cgcgaagaag attttctttc tcttcaagaa gcattgattt agcgtcacgg aattctttaa 300
ttgttgctac cattgggaac ataattttca atttcccata gactgaagca cgtagtaatg 360
cacgtaattg tgggtctaaag atttccgggt gtgctaaaca taaacgtatc gcacgataac 420
ccaagaacgg atcnttctnc gta 443

<210> 370
<211> 440
<212> DNA
<213> *Bacillus thuringensis*

<220>
<221> misc_feature
<222> (437)..(437)
<223> n is a, c, g, or t

<400> 370
ctttatgagc agcatcgata accattttta caagacgtaa aatagatggg ttatatgggt 60
ggatataagta tgatacttgt tcgttcatac ggtctgcagc cattgtgtat tggattaaat 120
cattcgttcc gatagagaag aaatcaactt ctttcgcgaa ttgatctgct aatactgctg 180
aagctgggat ttcaaccatc ataccaactt caatagaatc agaaacagtt gtacccgctt 240

ctacaagttt cgctttctct tctaataaaa tcgctttcgc ttgacggaac tcatcaagag	300
ttgcaatcat tgggaacata atttttaagt tgccgtatac gctagcacga agtaatgcac	360
gaagttgtgt acggaacaca tcttgctcat caagacataa gcgaattgca cggatatccca	420
agaacggatc atttctntta	440

<210> 371
 <211> 446
 <212> DNA
 <213> Staphylococcus hominis

<220>
 <221> misc_feature
 <222> (2)..(2)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (5)..(6)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (428)..(428)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (441)..(441)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (444)..(444)
 <223> n is a, c, g, or t

<400> 371	
cncncncctt atgaggaagc ttcaataacc tgtttaacta aacgtaaaat tgctggatta	60
tatggttgat ataaatatga aacacgttca gacatacgat cagctgccat agtatattga	120
attaagtcac tagttcctat actaaagaaa tctacttctt tagcaaagat atcagctaac	180
gcagcagtag aaggaatctc taccatgata cctacttcga tatcatcagc aacttcttgt	240
ccttcgctag ttaatttatc tttttcttct aaaagaatag ctttagcatc tctaaactct	300
ttaatagtag ctaccattgg gaacataata ttttaatttac cataagcaga tgcgcgtaat	360
aacgcacgta attgtgttct gaagatgtct tgttgatcta agcacaaacg aattgcacga	420
taaccanga acggattcat ntnta	446

<210> 372
 <211> 445
 <212> DNA
 <213> *Enterococcus faecium*

<400> 372
 cgcggtgtgct gcatcaatta cttttttgat caaacgtaaa attgatgggt tatatgggtg 60
 gtacaagtaa gaaacgcgtt cgttcatacg gtctgctgcc attgtgtatt gaatcaaadc 120
 gttcgtacct acagagaaga aatctacttc ttttgcaaac ttgtctgcta agactgctgc 180
 tgctggaadc tcgatcatga tgccgacttg gatcgtatca gatacttcct tgccttcact 240
 gatcaatttt tgtttttctt cttcaaagat cgcttttgct gcgcggaatt ctttgagtgt 300
 agctaccata gggaacatga tacgtaagtt accatgaaca gatgcacgaa gcaatgcacg 360
 cttttgtgta cggaacattt cgtcgccttg ttcagataaa ctgatacgca atgcacgata 420
 tccaagaac ggatcattct cctta 445

<210> 373
 <211> 445
 <212> DNA
 <213> *Clostridium perfringens*

<220>
 <221> misc_feature
 <222> (2)..(2)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (434)..(435)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (437)..(438)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (441)..(441)
 <223> n is a, c, g, or t

<400> 373
 cntgtttgtg agctccatct attgtcattt tgattaatct taatacagct ggatgcattg 60
 gattgtaaag gtatgatacc ttttactca ttctgtcagc agctaagtga tattgtatta 120
 aatcgttagt tcctattgag aagaaatcaa catgcttagc taattcatca gcataaactg 180

ctgcagctgg gatttcaacc atgatacccc attgaattga atctgagtat gctatacctt 240
ctgcttttaa ctacgctttg cattcttcaa caaatgcttt agcttggttg aattcttcta 300
atcctgaaat cattgggaac attactgcaa gatttccata aacagaagct cttataaag 360
ctcttatttg aactctaaag atatcttttc tgtctaagca taatcttata gctctgtatc 420
ccaagaacgg atcnntnntc nttaa 445

<210> 374
<211> 440
<212> DNA
<213> *Bacillus mycoides*

<220>
<221> misc_feature
<222> (431)..(431)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (437)..(437)
<223> n is a, c, g, or t

<400> 374
ctttatgagc agcatcgatc accattttta caagacgtaa aattgatggg ttatatgggt 60
gggtataagta agatacacgt tcgttcatac ggtctgcagc cattgtgtat tggattaagt 120
catttggtcc gatagagaag aaatcgactt cttttgcgaa ttgatctgct aatactgctg 180
aagctggaat ttcaaccatc ataccaactt caatagaatc agaaacagtt gtaccgcgtt 240
ggacaagtct ttctttctct tctaataaaa tcgctttcgc ttgacggaat tcatcaagag 300
ttgcaatcat cggaacata atttttaagt taccgtatac gctagcacga agtaatgcac 360
gaagttgtgt acggaacaca tcttggttctt caaggcataa gcgaattgca cggatatcca 420
agaacggatc nttctcntta 440

<210> 375
<211> 455
<212> DNA
<213> *Streptococcus oralis*

<220>
<221> misc_feature
<222> (2)..(3)
<223> n is a, c, g, or t

<220>

<221> misc_feature
 <222> (434)..(434)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (446)..(446)
 <223> n is a, c, g, or t

<400> 375
 cnntttccct tcgcgtgagc tgctttgata acgttggtga tcagcgtagg attgatgggt 60
 tgtaagggtt gtaaagggtat gaaacttgct cgttcatacg gtctgctgcc attgtgtatt 120
 ggatcaagtc gtttgtacca attgagaaga agtcaacttc tttagcaaat tgggtctgcaa 180
 gcattgctgc tgcaggaatt tcgatcatga taccaacttg gatattatcc gcaactgcaa 240
 caccttcagc aagaagggtt gctttttctt cgtcaaagac tgctttcgct gcacggaatt 300
 ctttcaagag cgcaaccatt gggaacatga tacgtaattg accgtgaaca gacgcacgaa 360
 gaagagcacg gatttgtgtg cggaacatag catctccagt ctcagagata gagatacgaa 420
 gagcacggaa tcnaagaac ggatcntttc tctta 455

<210> 376
 <211> 456
 <212> DNA
 <213> Enterococcus hirae

<220>
 <221> misc_feature
 <222> (2)..(2)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (447)..(447)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (450)..(450)
 <223> n is a, c, g, or t

<400> 376
 cnattttacct tcgcatgogc tgcatacatc acgttttttaa tcaaacgtag gattgatggg 60
 ttgtaagggt gatacaagta tgaaacacgt togttcatac ggtcagctgc catagtgtat 120
 tggatcaagt cattcggttc tactgagaag aagtcaactt ccttagcaaa cttgtcagct 180
 aagacagctg ctgctggaat ttgatcatg atgccgactt ggatcgtatc agatacttcc 240

acgccttcat tcaataatth ttgtttttcg tcttcaaaga ttgcttttgc agcacggaat 300
tctttaagag tcgctacat tggaacatg atacgtaagt ttccatgaac agatgcacgt 360
aataatgcgc gcatttgcgt acggaacatt tcgtcacctt gttctgacaa gctgattcgt 420
aatgcacgat agcccaagaa cggatcnttn tcttta 456

<210> 377
<211> 457
<212> DNA
<213> Enterococcus avium

<220>
<221> misc_feature
<222> (2)..(2)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (7)..(7)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (447)..(447)
<223> n is a, c, g, or t

<400> 377
cnatttncct tcgctgcgc tgcataatc acgtttttga ttaagcgtag aattgatggg 60
ttatatgggt ggtaaaggta agaaacgcgt tcgttcatac ggtcagctgc catcgtgtat 120
tgaattaagt catttgttcc gatactgaag aatcaactt ctttggcaaa cttgtcagct 180
agtacagctg cagctggaat ttgatcatg attccgactt ggatcgtatc agaaacttcc 240
acgccttctt taaccaatth ttctttttct tcgttgaaca ttttcttcgc tgcacggaat 300
tcttttaatg tcgcaacat tggaacatg atgcgtaagt taccatgaac agaagcgcgc 360
aacaatgcac gtaattgtgt acggaacatg tcatgccta gttcggatag actaatacgc 420
aatgcacgat aaccaagaa cggatcnttt ttcttaa 457

<210> 378
<211> 437
<212> DNA
<213> Staphylococcus saprophyticus

<400> 378
tcgtaagaag cttctattac ttgttttact aaacgtaata ttgaaggatt atatggttga 60
tacaagtaag aaacacgttc tgacattcta tcagcagcca ttgtatattg aattaaatca 120

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ttcgttccta tactgaagaa atcaacttct ttagcaaata catctgcaa cgcagcagta 180
gaaggaattt ctaccataat accaagttcg atatcatcag aaacttcaat gccttcattt 240
gttaagttat ctttttcttc aagtaacaat gcttttagcat cacggaactc ttggattgta 300
gctaccatag ggaacatgat attcaattta ccaaaagcag atgcacgtaa taatgcacgc 360
aactgtggtc tgaaaatatc aggttgatct aggcataaac ggatagcacg gtaaccaag 420
aacggatcat tctctta 437

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<210> 379
<211> 430
<212> DNA
<213> Staphylococcus haemolyticus

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<220>
<221> misc_feature
<222> (419)..(419)
<223> n is a, c, g, or t

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<220>
<221> misc_feature
<222> (422)..(422)
<223> n is a, c, g, or t

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<400> 379
gaagcttcat gacttgttta accaagcgta aaatagctgg gttataaggt tggataagt 60
atgaaacgcg ttctgacata cggtcagctg ccatagtata ttgaattaaa tcattagtag 120
caatactgaa gaaatccatt tcttttagcaa agatatcagc taaagcagct gtagatggaa 180
tctcaaccat gatacctaac tcaatttcat cagaaacgtc atgaccatca tttttaagat 240
tttctttttc ttctaacaga atggcttttag catcacggaa ttcatgatt gtagctacca 300
ttgggaacat aatgtttaat ttaccgtaag ctgacgcgcg taataatgca cgtaattgtg 360
ttctgaaaat atcttgttga tctaagcata gacgaattgc tctgtaaccc aagaacggnt 420
cnttctctta 430

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<210> 380
<211> 444
<212> DNA
<213> Enterococcus flavescens

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<220>
<221> misc_feature
<222> (1)..(1)

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<223> n is a, c, g, or t

<220>

<221> misc_feature

<222> (438)..(439)

<223> n is a, c, g, or t

<220>

<221> misc_feature

<222> (442)..(442)

<223> n is a, c, g, or t

<400> 380

ngcatgcgct gagtcgatca cgtttttgat caaacgtaaa attgatgggt tgtatggttg 60

gtacaagtaa gacacgcgct cgttcatgcg gtctgcagcc attgtgtatt ggatcaagtc 120

attggtacca atactgaaga agtcaacttc cttcgcaaac ttgtctgcta agacagcagc 180

tgctggaatt tcgatcatga ttccgacttg gatctcgta gaaacctcaa cgccttcgctc 240

aatcaatttt tgacgctctt cttcatacat tttcttcgca gtacggaact ctttcaatgt 300

tgccaccatt gggaacatga tacgtaagtt gccgtgagca gaagcacgta acaacgcacg 360

aagttgggta cggaacatgt catccccaag ttcagataag ctgatacgca atgcacgata 420

gccaagaac ggatattnt chta 444

<210> 381

<211> 439

<212> DNA

<213> Enterococcus casseliflavus

<220>

<221> misc_feature

<222> (429)..(429)

<223> n is a, c, g, or t

<220>

<221> misc_feature

<222> (434)..(434)

<223> n is a, c, g, or t

<400> 381

gcgctgagtc gatacgtttt tgatcaaacg taaaattgat gggttgtatg gttggtacaa 60

gtaagacacg cgctcggttca tgcggtctgc agccatgggt tattggatca agtcattggt 120

accaatactg aagaagtcaa cttccttcgc aaacttgtct gctaagacag cagctgctgg 180

aatttcgatc atgattccga cttggatctc gttagaaacc tcaacgcctt cgtcaatcaa 240

tttttgacgc tcttcttcac acattttctt cgcagtagcg aactctttca atgttgccac 300

cattgggaac atgatacgta agttgccgtg agcagaagca cgtaacaacg cacgaagttg	360
ggtagcgaac atgtcatccc caagttcaga taagctgata cgcaatgcac gatagcccaa	420
gaacggatna tttntctta	439

<210> 382
 <211> 450
 <212> DNA
 <213> Enterococcus gallinarum

<220>
 <221> misc_feature
 <222> (6)..(6)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (443)..(443)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (447)..(447)
 <223> n is a, c, g, or t

<400> 382	
accttngcat gtgctgaatc gattacgttt ttgatcaacg tagaatagat gggttatatg	60
gttggtaaag atatgaaact tgttcattca tacggctcgc agccattgtg tattggatca	120
agtcattggt accaatactg aagaagtcta cttccttggc aaatttgtca gctaagacag	180
ctgctgcagg aatttcgatc atgataccta cttgaatata ttcagagacg gttacgcctt	240
catcgatcaa tttttgacgt tcttcttcgt acattttttt cgcagcacgg aactctttca	300
atgttgccac cattgggaac ataatccgca agtttccgtg agcagaagca cgtaacagcg	360
cacgaagttg tgtacggaac atgccgtcac ccaactcaga caaactgata cgcaatgcac	420
gatagcccaa gaacggatct ttntccntta	450

<210> 383
 <211> 443
 <212> DNA
 <213> Enterococcus raffinosus

<220>
 <221> misc_feature
 <222> (1)..(1)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (432)..(433)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (438)..(438)
 <223> n is a, c, g, or t

<400> 383
 ntgtgctgca tcaatgacgt ttttaatcaa acgtaagatt gatggggttat atggttgata 60
 caggatatgaa acgcgttctgt tcatacgggtc agcagccatt gtgtattgaa tcaagtcggt 120
 tgttccgata cttaaagaagt caacttcttt tgcaaacttg tcagctagaa cagctgcggc 180
 agggatctcg atcatgattc cgacttgaat cgtatcagaa accttcacgc ctctgttaac 240
 aagcttttct ttttcttctgt tgaacatttt ctctgctgca cggaactctt ttaatgttgc 300
 aaccattggg aacatgatgc gtaaattgcc atgaactgaa gcgcgtaaca atgcacgtaa 360
 ctgtgtacgg aacatatcgt cgcctaattc agataaactg atacgcaatg cagcataacc 420
 caagaacgga tnnttctnctg taa 443

<210> 384
 <211> 453
 <212> DNA
 <213> Enterococcus villorum

<220>
 <221> misc_feature
 <222> (3)..(3)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (14)..(14)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (432)..(432)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (434)..(434)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (441)..(441)

<223> n is a, c, g, or t

<220>

<221> misc_feature

<222> (451)..(451)

<223> n is a, c, g, or t

<400> 384

ggnctctcgt cgtnagctgc atcaatcacg tttttgatta aacgtaaaat tgatgggtta 60

taaggttggt ataagtatga aacgcgttcg ttcatacggg cagctgccat agtgtattga 120

atcaaatacat ttgttcctac tgagaagaag tcaacttcct tcgcaaactt gtcagctaaa 180

acagcagctg caggaatttc aatcataatg ccgacttgga tcgtatcaga tacttccacg 240

ccttcattca ataacttttg tttttcatct tcaaagattg cttttgcccc acggaattct 300

ttaagtgtcg ccaccattgg gaacatgata cgtaagttac cgtgaacgga tgcacgcaat 360

aacgcacgca tttgtgtacg gaacatttcg tctccttggt cagaaagact gatacgtaat 420

gcacgatatc cnangaacgg nttatttttc nta 453

<210> 385

<211> 442

<212> DNA

<213> Clostridium difficile

<220>

<221> misc_feature

<222> (4)..(5)

<223> n is a, c, g, or t

<220>

<221> misc_feature

<222> (9)..(9)

<223> n is a, c, g, or t

<220>

<221> misc_feature

<222> (13)..(13)

<223> n is a, c, g, or t

<220>

<221> misc_feature

<222> (17)..(17)

<223> n is a, c, g, or t

<220>

<221> misc_feature

<222> (23)..(23)

<223> n is a, c, g, or t

<220>

<221> misc_feature
 <222> (36)..(36)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (67)..(67)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (83)..(83)
 <223> n is a, c, g, or t

<400> 385
 ttttnggang gcntctntcg tangcattgt ctatancagt ctttataagt cttaaaacag 60
 ctggatnaaa ttgattgtaa agntaactta tcttttgatt cattctatca actgcacaag 120
 tgtattgaat taaatcatta gttcctatag agaagaaatc tacgtgttta gccaatacat 180
 cagatatcac agcagcagat ggaacttcta tcatcatacc aatttctaca tcttttagcat 240
 aagccacacc ttcagaatca agttctgcta aaacttcttt tacaacttct ttagcttgta 300
 acaactcttc taaagatgaa atcattggga acatgattct taatcttcca tgaacactag 360
 ctctatataa agctctcaat tgagtcctaa atatatcttt tctatctagg caaagcttta 420
 ttgctctgta acccaagaac gg 442

<210> 386
 <211> 444
 <212> DNA
 <213> Streptococcus mitis

<220>
 <221> misc_feature
 <222> (1)..(1)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (424)..(424)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (442)..(442)
 <223> n is a, c, g, or t

<400> 386
 ngcgtgagct gccttgataa cgttgttgat caagcgaagg attgatgggt tatatgggtg 60
 gtaaaggat gaaacttgct cgttcatacg gtctgctgcc attgagtatt ggatcaagtc 120

gtttgttcca attgacatga agtctacttc ttttgcaaat tggctctgcaa gcatcgctgc 180
 tgcagggatt tcaatcatga taccaacttg gatatcatcc gcaactgcaa caccttcagc 240
 aagaaggttt gccttttctt cttcataaac tgctttggct gcacggaatt ctttcaaaag 300
 agcaaccatt gggaacatga tacgcaattg accatgaaca gaagcacgaa gaagagcacg 360
 gatttgtgta cggaacattg catctccagt ttcagaaata gagatacgaa gggcacggaa 420
 tccnaagaac ggatattttt cnta 444

<210> 387
 <211> 446
 <212> DNA
 <213> Bacillus halodurans

<220>
 <221> misc_feature
 <222> (1)..(1)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (424)..(424)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (435)..(436)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (439)..(439)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (443)..(443)
 <223> n is a, c, g, or t

<400> 387
 nccttcgcta tgagctgctt taataaccat atcgacgagg cgtaaaatcg cagggtggta 60
 tggctgatac aggtaggaga ctgctcatt catgcggtca gcagccatcg tatattgaat 120
 taagtcgttc gttccgatac tgaaaaagtc tacttctttt gcaaaaagat tagccgctac 180
 cgccgtcgat gggatttcta ccatgattcc cacttcaatt gaatcggata cgtccactcc 240
 ttcactaaga agcttgtctt tttcctcttg catgatcgct tttgcttggc gaagctcttc 300
 aagggtggcg atcattggaa acatcacctt taagttaccg tatgtgcttg cgcaagcaa 360

ggcacggagt tgggtccgga aaatatcttg tttttcaagg cacagacgaa tcgcccggaa 420
aocnaagaac ggatnnttnt tcntaa 446

<210> 388
<211> 436
<212> DNA
<213> *Bacillus weihenstephanensis*

<220>
<221> misc_feature
<222> (1)..(1)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (427)..(427)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (433)..(433)
<223> n is a, c, g, or t

<400> 388
ntgagcagca tcgataacca tttttacaag acgtaaaata gatgggttat atggttggta 60
taagtaagct acttgttcgt tcatacgggc tgcagccatt gtgtattgga ttaagtcatt 120
tgttccaata gagaagaaat caacttcttt tgcgaactga tcagctaata ctgctgaagc 180
tggaatttca accatcatat caacttcaat agaatcagaa acagttgtac ccgctttaac 240
aagtctttct ttctcttcta ataagattgc tttcgcttga cggaactcat caagagttgc 300
aatcattggg aacataattt ttaagttacc gtatacgcta gcacgaagta atgcacgaag 360
ttgtgtacgg aacacatctt gtcacatcaag acataagcga attgcacggc atcccaagaa 420
cggatcnttc tcntta 436

<210> 389
<211> 458
<212> DNA
<213> *Streptococcus species*

<220>
<221> misc_feature
<222> (2)..(3)
<223> n is a, c, g, or t

<220>

<221> misc_feature
 <222> (5)..(5)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (8)..(8)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (435)..(435)
 <223> n is a, c, g, or t

<400> 389
 cnnanttncc ttgcggtgag ctgctttgat aacgttggtta atcaacgaag gattgatggg 60
 ttgtatgggtt ggtaaaggta tgaaacttgt tcgttcatac ggtcagcagc catttgtgtat 120
 tggataagggt cgtttgttcc gattgagaag aagtcaactt ctttcgcaaa ttgggtcagca 180
 agcatagctg cagctgggat ttcaatcatg ataccaactt ggatatcatc tgaaacggca 240
 acaccttcag ctttaagggtt tgctttttct tcatcaaaga ttgcttttagc agcacggaat 300
 tctttaagaa gagcaaccat tgggaacatg atacgaagtt gtccgtgtac agatgcacga 360
 agaagtgcac ggatttgtgt acggaacatt gcatttcctg tttctgagat agaaatacga 420
 agtgcacgga atccnaagaa cggatccttt ttccttaa 458

<210> 390
 <211> 446
 <212> DNA
 <213> Streptococcus gordonii

<220>
 <221> misc_feature
 <222> (1)..(1)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (431)..(431)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (442)..(442)
 <223> n is a, c, g, or t

<400> 390
 ntgccttcgc atgagccgcc ttgataacat tgttgatcaa gcgaaggata gatggggttat 60
 aagggtgata gaggtaagag acttggttcat tcatccggtc agctgccata gtgtactgga 120

tcaagtcggtt ggtaccaatt gagaagaagt caacttcctt ggcaaattga tccgccaaca	180
tagctgctgc tggaatttca atcatgatac ccacttgaat gttatccgct acagcaacac	240
cttcagcttg caatttcgct ttttcttctt cgtaaactgc tttagcctta cgggaattctg	300
ttagaagggc taccattggg aacatgatac gtaattgtcc atgtacagac gcacgtaaga	360
gagcgcggat ttgtgtacgg aacatagcat taccagtttc agagatagag atacgcaaag	420
cacggaagcc naagaacggt cntttt	446

<210> 391
 <211> 446
 <212> DNA
 <213> Streptococcus canis

<220>
 <221> misc_feature
 <222> (2)..(2)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (424)..(424)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (435)..(435)
 <223> n is a, c, g, or t

<400> 391	
cncgtgagct gctttgataa cgttgttaat caaacgaagg attgatgggt tgtatgggtg	60
gtaaaggtat gaaacttggt cgttcatacg gtcagcagcc attgtgtatt ggataaggtc	120
gtttgttccg attgagaaga agtcaacttc tttcgcaaatt tggtcagcaa gcatagctgc	180
agctgggatt tcaatcatga taccaacttc gatatcatct gaaacggcaa caccttcagc	240
tttaaggttt gctttttctt catcaaagat tgcttttagca gcacggaatt ctttaagaag	300
agcaaccatt gggaacatga tacgaagttg tccgtgtaca gatgcacgaa gaagtgcacg	360
gatttgtgta cggaacattg catttcctgt ttctgagata gaaatacgaa gtgcacggaa	420
tccnaagaac ggtcnttttt ctctaa	446

<210> 392
 <211> 437
 <212> DNA
 <213> Bacillus pumilus

<220>
 <221> misc_feature
 <222> (2)..(2)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (415)..(415)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (426)..(426)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (433)..(433)
 <223> n is a, c, g, or t

<400> 392
 cntacgctgc ttcataacaa gcgtaatcaa acgtaaaatc gctggattgt aaggctggta 60
 aagataagac actcgttcgt tcattcgatc agcagccatt gtgtattgaa tcaaatcatt 120
 tgttccaata ctgaagaaat caacttcttt tgcgaattgg tctgcgatga cagcggttga 180
 tggaatttct accattatac cgatttcaat ggaatcggat acgtctgtac cagcggcaac 240
 caatgcttct ttttcttcaa gtaaaatggc ttttgcttct ctaaattctg ataatgtcgc 300
 gatcataggg aacatgattt tcaagtttcc atatgtactt gcacgaagta aggcgcgtag 360
 ttgtgttctg aaaatctcct gttcttcgag gcaaaggcgg atcgctctaa agccnaagaa 420
 cggatntttt tcnttaa 437

<210> 393
 <211> 437
 <212> DNA
 <213> Bacillus species

<220>
 <221> misc_feature
 <222> (426)..(426)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (429)..(429)
 <223> n is a, c, g, or t

<220>

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<221> misc_feature
<222> (431)..(431)
<223> n is a, c, g, or t

<400> 393
tgagcgcatac gataaccatt tttacaagac gtaaaataga tgggttatat ggttggtata      60
agtatgatac ttgttcgttc atacgggtctg cagccattgt gtattggatt aaatcatttg      120
ttccgataga gaagaagtca acttctttcg cgaattgatac tgctaatact gctgaagctg      180
ggatttcaac catcatacca acttcaatag aatcagaaac agttgtaccc gcttctacaa      240
gtttcgcttt ctcttctaataaaaattgctt ttgcttgacg gaactcatca agagttgcaa      300
tcattgggaa cataattttt aagttaccgt atacgctagc acgaagtaat gcacgaagtt      360
gtgtacggaa cacatcttgc tcatcaagac ataagcgaat tgcacggtat cccaagaacg      420
gatccnttnt nctttaa                                                    437

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<210> 394
<211> 443
<212> DNA
<213> Lactococcus lactis

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<220>
<221> misc_feature
<222> (16)..(16)
<223> n is a, c, g, or t

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<220>
<221> misc_feature
<222> (422)..(422)
<223> n is a, c, g, or t

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<220>
<221> misc_feature
<222> (430)..(431)
<223> n is a, c, g, or t

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<220>
<221> misc_feature
<222> (437)..(437)
<223> n is a, c, g, or t

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<400> 394
gtgagctgct ttgatncatt gttaatcaaa cgaaggattg atggattgta aggttggttaa      60
aggtaagaaa cttgttcatt catacggtct gcagccattg tatattggat gaggtcgttt      120
gtaccaattg agaagaaatc aacttcctta gcaaattggt ctgcaagcat tgctgctgct      180
ggaatttcaa tcatgatacc tacttcgata ccatctgcaa ctggaacacc ttcagcaatc      240

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aattttgctt tttcttcgtc ataaatcttc ttagctgcac ggaactcagt tacgagagca 300
accattggga acatgatacg aagttgtccg tgtacagaag cacgcaagag tgcacgcaat 360
tgtgtacgga acattccgtc accagctggt gaaaggctga tacgaagtgc acgccatccc 420
angaacggtg nttttnttt taa 443

<210> 395
<211> 454
<212> DNA
<213> Bacillus firmus

<220>
<221> misc_feature
<222> (8)..(8)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (16)..(16)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (19)..(19)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (22)..(22)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (449)..(449)
<223> n is a, c, g, or t

<400> 395
tccaggangg gttctntcnt angctgcgtc aattaccatt ttaactaaac gcaggattgc 60
aggattatac ggctggtaaa ggtaagaaac acgctcattc atgcgggtctg cagccattgt 120
gtactgaatt agatcattag tgccaacact gaagaaatcg acttcttttag caaactgac 180
agccataaca gcagttgaag gaatttcaac cataattcca atttcaatgt tgtcggcaac 240
ctctgtctct tcgctcacia gcttttggtt ttctttcttca aggattgctt tgccctgacg 300
gaattcttca agagtggcaa tcataggga catgatttta aggtttccat aggtgcttgc 360
tcttaataaa gcccttaatt gcgtcctgaa catatcctgt tcttccagac acagacgaat 420
cgcccgggaag cccaagaacg gattcattnt ctta 454

<210> 396
 <211> 434
 <212> DNA
 <213> Haemophilus influenzae

<220>
 <221> misc_feature
 <222> (425)..(426)
 <223> n is a, c, g, or t

<400> 396
 tgagaggcat caatcacttg tttaattaaa ccaagcacag aggggtgcat cggattataa 60
 agatgggaaa taaactcatt accgcgatct acagccaaag tatattgagt taaatcggtta 120
 gtaccgatac taaagaaatc cacttccttt gctaaaaatt ttgcatttac tgcggcagag 180
 ggggtttcga ccattacacc aacttgata ttattatcaa acagtctccc ctcttcacgt 240
 aattccgctt ttaatgtttc aataaccgct tttaattccc gaatttcttc tacagaaata 300
 atcatcggga acattaccgc caatttacca aaagctgaag cacgtaacac cgcgcgtaat 360
 tgtgcattta aaatttcacg acgatctaata gcaatgcgaa tcgcacgcca tcccaagaac 420
 ggatnntttt tctt 434

<210> 397
 <211> 442
 <212> DNA
 <213> Streptococcus bovis

<220>
 <221> misc_feature
 <222> (420)..(420)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (432)..(432)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (438)..(438)
 <223> n is a, c, g, or t

<400> 397
 tgagctgctt tgataacggt gttaatcaaa cgaaggattg atgggttata tgggttggtta 60
 aggtatgaaa cttgttcatt catacgggtca gcagccattg tgtattggat aaggctggtt 120
 gtcccgattg agaagaagtc aacttccttt gcaaattggt cagcaagcat agctgcagct 180

gggatttcaa tcatgatacc aacttggata tcatctgaaa cggcaacacc ttcagcttta 240
 aggttagctt tttcttcata aaagattgct ttagcagcac ggaattcttt aagaagtgca 300
 accattggga acatgatacg aagttgtccg tgtacagatg cacgaagaag tgcacggatt 360
 tgtgtacgga acattgcatt tctgtttct gagatagaaa tacgaagtgc acggaatccn 420
 aagaacggtc cntttttnct ta 442

<210> 398
 <211> 443
 <212> DNA
 <213> Enterococcus durans

<220>
 <221> misc_feature
 <222> (431)..(432)
 <223> n is a, c, g, or t
 <400> 398
 tgtgtgcat caatcacgtt ttgatcaaa cgtaaaattg aagggttata aggttgatac 60
 aagtaagata cacgttcgtt catgcggtca gctgccattg tgtattgaat caagtcattc 120
 gtacctactg agaagaagtc aacttccttc gcaaacttat ctgctaagac agctgctgca 180
 gggatttcaa tcatgatgcc gacttggatc gtatcagata cttccacgcc ttcgctcact 240
 aatttttgtt tttcttcttc aaagattgct ttcgctgcac ggaattcttt aagagtgct 300
 accattggga acatgatgcg taagtttcca tgaacagatg cacgtaacaa tgcgcgcatt 360
 tgtgtacgga acatttcgtc acctaatcca gacaagctga tacgtagcgc acgatagccc 420
 aagaacggat nnttttcct taa 443

<210> 399
 <211> 450
 <212> DNA
 <213> Streptococcus sanguis

<220>
 <221> misc_feature
 <222> (434)..(435)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (441)..(441)
 <223> n is a, c, g, or t

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<400> 399
cgcatgagct gccttgataa cattgttaat caagcgaagg atagatggat tgtaagggtg      60
atagaggtaa gagacttgct cattcatccg gtcagccgcc atagtgtact gaatcaagtc      120
gttagtacca attgagaaga agtctacttc cttggcaa attgatccgcca acatagctgc      180
tgctgggatt tcaatcatga taccacttg gatattatct gctactgcaa cgccttcagc      240
ttgcagctta gctttttctt cgtcataaac cgcttttagct ttgcggaatt ctgtcagaag      300
ggccaccatt ggaacatga tacgcaattg tccatgtaca gaagcacgca agagagcgcg      360
gatttgtgta cggaacatag catcgccagt ttcagagata gagatacgca aagcacggaa      420
accaaagaac ggtntttttt ntctttaaaa      450

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<210> 400
<211> 453
<212> DNA
<213> Escherichia coli

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<220>
<221> misc_feature
<222> (440)..(441)
<223> n is a, c, g, or t

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<400> 400
tcctttacct tctgcatgag agcatcaata acttgcttga tcaagttcag tacggacggt      60
gacattggct ggtagagatg tgaaatcata tcattaccac ggtcaactgc cagggtgtac      120
tgcggttaaat cattggtgcc gatactaaag aaatcaactt ctttggctaa atgacgcgca      180
atggctgcgg ctgctggtgt ttccaccatt acgccgatct caattgactc gtcaa atgct      240
ttaccttctg cagcaattc ctgtttgtag atctcgatct ctttcttcag tgcacgcact      300
tcttcaacag agatgatcat cggaacata atgcgcagct taccgaaagc agaggcacgc      360
agaatgcac gcacctggtc acgcaggatt tctttacgat ccatggcgat acgcactgca      420
cgccagccca agaacggatn nttttttctt taa      453

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```

<210> 401
<211> 449
<212> DNA
<213> Serratia liquefaciens

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<220>
<221> misc_feature
<222> (1)..(1)
<223> n is a, c, g, or t

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<220>
 <221> misc_feature
 <222> (4)..(4)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (17)..(17)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (427)..(427)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (435)..(435)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (438)..(438)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (445)..(445)
 <223> n is a, c, g, or t

<400> 401
 ntgncttctg catgagnatg catcaataac ctgtttgatc aggccaagca ctgatgggga 60
 catcggttta tagagatgag aaatcagctc attgccgcga tctaccgcca gagtatactg 120
 ggttagatcg tttgtcccaa tactaaagaa gtcgacttct ttcgccaggt gatgagcaat 180
 cactgccgcg gccggtgttt ccaccattac gccacttca atgggtctcgt caaaggcctt 240
 ggattcttca cgcagctgcg ccttcagcgt ctcgatttca cctttcagat cgcggacttc 300
 ttccacggaa atgatcatcg ggaacatgat gcgcagtttg ccgaacgcgg aagcgcgcag 360
 gatggcgcgc agttgcgcgt gcaggatttc tctgcggtcc atggcgatac gaatcgcgcg 420
 ccagccnaag aacgnttntt tttanttta 449

<210> 402
 <211> 425
 <212> DNA
 <213> Proteus mirabilis

<400> 402
 gtgtgatgca tcaatcacct gtttaatcag attaagtaca gcaggtgaca ttggattata 60

tagatgagat atcagctcat ttccacgggc tacagccaga gtatattgtg ttagatcggt	120
agtcccaata ctgaaaaagt caacttcttt tgccatatgg cgagccataa cagccgctgc	180
tggcgtttca accataacac cgacttcgat agattcatca aaaggcttat tttcttcacg	240
aagctggctt ttcagtatct caagttccgc tttcaatgct cggatctctt caacagagat	300
aatcattgga aacataatac gtagtttacc aaaagcagac gctcttaaga tagcacgtaa	360
ttgtggatga aggatctctt tgcggccaag acaatacga attgcacgcc aaccaagaa	420
cggtat	425

<210> 403
 <211> 433
 <212> DNA
 <213> *Proteus vulgaris*

<400> 403	
ccttctgcat gtgatgcac aataacctgt tttatcaggt taagtactgc tggtagacatt	60
ggattataca gatgagatat cagctcattt ccacgggtcta cagccagagt atattgtggt	120
agatcggttag tcccaatact gaaaaagtca acttcttttg ccatgagacg tgccattacg	180
gccgcgcgag gggtttcaac catgacaccg acttcgatag actcatcgaa agttttgttt	240
tctgcacgaa gctggctttt cagtatttca agttctgctt tcaatgcgcg aatctcttca	300
atagagataa tcattggaaa cataatgcgt agtttacc aaagcagatgc tcttaagata	360
gcacgtaatt gcgaatgaag gatctcttta cggtaagac aaatacgaat tgctctccaa	420
cccaagaacg gtc	433

<210> 404
 <211> 503
 <212> DNA
 <213> *Streptococcus pyogenes*

<400> 404	
ttattaggcg ccgaaggggc aaggcatact gctcaatctc tcaggcaaaa ggacagaagg	60
taaaatacaa acaccattaa gaacagtctt agtctttttt gtgtttgctg ttttatcatt	120
gcttcagaag ttgtctcaaa gaaagagata gcttttttct tttggcgtct tcgatgactt	180
ttaggagaga aagatgatag cactcggttaa attaattgat aaccttgttt ggggaccgcc	240
cctcttaatt ttattgggtg ggacggggat ttaccttacc agtcatttag gattaattca	300
aatcttaaaa ctaccaagag cctttaaaact ctttttttca gatgacgaag gacatggaga	360
tatttcatcc ttgtctgctc ttgcaactgc ccttgccgct actgtcggaa ctggtaacat	420

tggttgggggtt gccactgcta tcaagtctgg tggtcctgga gcgctctttt ggatgtgggt	480
tgccgctttt tttggaatgg ccc	503

<210> 405
 <211> 469
 <212> DNA
 <213> Streptococcus oralis

<400> 405	
ccgtaaaggc accgaagggg caaggcaggt aactgctcaa actctcaggt aaaaggacag	60
agctaggata gaccgctttt tggcatttat ctaagcattc cagagtacat gtatcttgca	120
tgtactcttt cttttggggg tgaaagatag gagaaggaca tgtagaatt gcttaaagcg	180
cttgatgctt ttgcttgggg gcctcccctc ttgatcttat tggtcggaac gggatatctat	240
ttgaccatcc gactgggcct tttgcaggtt actcgtctcc ctaaggcctt tcagttgatc	300
tttaccaagg acaaggggca cggcgatgtg tcgagctttg ctgctctctg tacggctcta	360
gcagccacag ttggtacggg aaatatcatc ggggtagcga cagccattaa ggttgaggga	420
ccaggggccc tcttttggat gtggatggcg gccttctttg gaatggccc	469

<210> 406
 <211> 467
 <212> DNA
 <213> Streptococcus faecalis

<400> 406	
gtaaaggcac cgaaggggca aggcaggtaa ctgctcaaac tctcaggtaa aaggacagag	60
ctaggataga ccgctttttg gcatttatct aagcattcca gagtacatgt atcttgcattg	120
tactctttct tttgggggtt aaagatagga gaaggacatg ttagaattgc ttaaagcgct	180
tgatgctttt gcttgggggc ctcctctctt gatcttattg gtcggaacgg gtatctatctt	240
gaccatccga ctgggccttt tgcaggttac tcgtctccct aaggcctttc agttgatctt	300
taccaaggac aaggggcacg gcgatgtgtc gagctttgct gctctctgta cggctctagc	360
agccacagtt ggtacgggaa atatcatcgg ggtagcgaca gccattaagg ttggaggacc	420
agggggccctc ttttggatgt ggatggcggc cttcttttga atggccc	467

<210> 407
 <211> 578
 <212> DNA
 <213> Streptococcus agalactiae

<400> 407
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 aagagtaaaa caactcctcc aatctctcag gcaaaaggac agaagctaaa agccaatatt 120
 aataatgagt agtaagctta ttaagtttac tactaccttt atttgtgcgc tttttagcta 180
 gcatctttca gaagttatct cttttagaga taactttttt cgtttcatta cagaatccat 240
 aggtatgtca tgtatcaaag gagaacatat gctaacactt tttactcata tcaatagctt 300
 cgtttggggg ccacctttac ttgctttatt agtcggaaca ggtatttacc tatcatttcg 360
 cttagggtttt gttcaattga gacaactttc tagagctttc aaattgattt tccgagaaga 420
 taacggacaa ggggatattt caagttatgc tgctcttgca actgctcttg ctgcaacggg 480
 agggacaggt aatatcgttg gtgtggctac ggctattaaa tctggaggac caggagcttt 540
 gttttggatg tgggtagccg ctttttttgg aatggccc 578

<210> 408
 <211> 468
 <212> DNA
 <213> *Streptococcus pneumoniae*

<400> 408
 gtaaaggcac cgaaggggca aggcaggcaa ctgctcaaac tctcaggtaa aaggacagag 60
 ctaggataga ccgcttttta gcatttatct aagcattcca gagtacatgt atcttgcatg 120
 tgctctttct tttgggggtt aaacgatagg agaaggaaat gttagaattg cttaaataca 180
 tcgatgcttt tgcttgggga ccgcccctct tgattttatt ggtcggaaca gggatttacc 240
 taaccatgcg gctaggactc ttgcaggttt tgcgctctgcc caaggccttt cagcttattt 300
 ttatccagga taagggacat ggtgatgtat ccagttttac agctctgtgt acagccttgg 360
 catcaactgt tggaacagga aatatcatag gagttgcgac ggctatcaag gttggtggac 420
 caggagctct attttggatg tggatggcgg ttttctttgg aatggccc 468

<210> 409
 <211> 463
 <212> DNA
 <213> *Enterococcus durans*

<220>
 <221> misc_feature
 <222> (1)..(1)
 <223> n is a, c, g, or t
 <220>

<221> misc_feature
 <222> (3)..(3)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (21)..(21)
 <223> n is a, c, g, or t

<400> 409
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 atagaccgct ttttagcatt tatctaagca ttccagagta catgtatctt gcatgtgctc 120
 tttcttttgg gggtgaaacg ataggagaag gaaatgtag aattgcttaa atcaatcgat 180
 gcttttgctt ggggaccgcc cctcttgatt ttattggtcg gaacagggat ttacctaacc 240
 atgcggctag gactcttgca ggttttgcgt ctgccaagg cctttcagct tatttttatc 300
 caggataagg gacatggtga tgtatccagt ttacagctc tgtgtacagc cttggcatca 360
 actgttggaa caggaaatat cataggagtt gcgacggcta tcaaggttgg tggaccagga 420
 gctctatttt ggatgtggat ggcggttttc tttggaatgg ccc 463

<210> 410
 <211> 536
 <212> DNA
 <213> Streptococcus anthracis

<400> 410
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 atagcggata atctctcagg taaaaggaca gagacaagcg aaagaaaatg ccgatttgta 120
 tcggtttatt tttctatccc ttgtttctcc agagaccatt tcatttactt gaagtggttt 180
 ttattttttc taaaaaagga gaataaagat ggagacagta agtaaagtat tagaacaaat 240
 caatcactat gtgtggggat taccaacggt attgttactc gttggtactg gtattattct 300
 cacagtgcgt ttaaaagggt tacagtttag taaactatta tacgctcaca aactagcttt 360
 taaaaaatca gaagatacat cttcctctgg agatattagc cacttccaag cgcttatgac 420
 agctatggcg gcaacgattg gtatgggaaa tatagctggg gttgcaactg ctgtgacgat 480
 cggtggacct ggtgcaatct tttggatgtg gattactgct ttgtttggaa tggccc 536

<210> 411
 <211> 537
 <212> DNA
 <213> Bacillus cereus

<400> 411
 cccctcagc cctatcatat agtgcagagg aaacagagca ccgaaggagc aaatccgctg 60
 tattagcgga taatctctca ggtaaaagga cagagacaag cgaaagaaaa cgccgatttg 120
 tatcggttta tttttctatt ccttgtttct ccagagacca tttcatttat gtgaagtgg 180
 tttttatttt ttctaaaagg agaataaaga tggagacagt aagtaaagta ttagaacaaa 240
 tcaatcacta cgtatgggga ttaccaacct tttcctttt agtcgggact ggaatcattc 300
 tcacagtgcg tctaaaaggt ttgcagttta gtaaactggt atacgctcac aaactagcat 360
 ttgaaaaatc agaagataca tcttcttttg gagatattag tcatttccaa gcactcatga 420
 cagcaatggc cgccaccatc gggatgggaa atatagctgg tgcgcaaca gctgttacia 480
 tcggtggacc gggggcaata ttttgatgt ggatcactgc cttgtttgga atggccc 537

<210> 412
 <211> 561
 <212> DNA
 <213> *Streptococcus mutans*

<400> 412
 actgataatt gacggacttc tggagagacc tactaggcgc cgaaggggca aggctgtttg 60
 ctcaaactct caggcaaaag gacagaaaag aaaaaagaa tttttaatgt tgaaacaatt 120
 cttatcttct aactctagag gtatcgtcaa gtattgacaa cctctttttt gatttccatt 180
 tcggtttatg aggagaaaag tttatatgtt aacatttttt aaagctctag acagccttgt 240
 ctggggtgct cccctattag ttcttttagt cggtactgga atttatttga gtactcgctt 300
 aagattattg caggtgttga aactcccttt agccttttaa ctcattcttg ccgaggacaa 360
 aggggaaggt gatatttcca gttttgcggc tttagctacc gctcttgctg ccactgttgg 420
 aactggaaat atcgttggtg ttgccactgc aatcaaagct ggcgggccgg gagcactctt 480
 ttggatgtgg atagcagctt tttttggtat ggcaactaaa tatgccgaag gtcttctggc 540
 tataaaatac cgtactaagg a 561

<210> 413
 <211> 1680
 <212> DNA
 <213> *Listeria monocytogenes*

<400> 413
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 ctacctgcct taaagaaagc gctcaacata aaaaaacttg ttttcagaaa ataaaaatcg 120

tgccaaatcg gctcagctat gctataatag gtaagttgat ttaaacgaga cgatagcgac	180
ggaggaaaat aaatctatct tctctcttct tttggctaata cttcacgata aatgtttgga	240
tttttaattt aggaggaaac aagattgaat ttaagaaatg atattcgtaa tgtagcaatt	300
attgcccacg ttgaccatgg taaaacaact ctagtagacc aattattacg ccagtcaggc	360
acattccgcg acaatgaaac agttgcagaa cgcgcaatgg acaacaatga tttagaaaga	420
gaacgcggta ttacaatttt agcgaaaaat acagcgatta agtatgaaga tacacgtgta	480
aacatcatgg atacacctgg acacgccgat ttcgggtggag aagtagaacg tatcatgaaa	540
atgggtgatg gtgttctttt agtagtggac gcgtatgaag gtacgatgcc tcaaacacgt	600
tttgtactaa aaaaagcact agaacaaaac ctaactccaa tcgtagtagt aaacaaaatt	660
gaccgtgact ttgctcgccc agaagaagtt gttgatgaag tattagaatt attcatcgaa	720
ctaggcgcaa acgacgatca attagaattc ccagttgttt atgcttctgc aatcaacgga	780
acttcaagct atgattccga tccagcagaa caaaaagaaa caatgaaacc acttttagac	840
acaattatcg aacatatccc ggctccagtt gataatagcg acgaaccatt acaattccaa	900
gtatcattac ttgattataa tgactatggt ggctcgatcg gtattggccg cgtattccgt	960
ggaacaatgc acgtgggaca aacagttgct ttaattaaac ttgatggcac agtaaaacaa	1020
ttcogtgtaa cgaaaatggt cggtttcttc ggactaaaac gtgacgaaat taaagaagca	1080
aaagctgggtg atttagtagc attagcaggt atggaagaca tcttcgttgg tgaaacagta	1140
acaccatttg accaccaaga agcaactccg ttattacgta ttgatgagcc aaccttgcaa	1200
atgactttcg taacaaataa cagtcctttc gctggctcgtg aaggtaaaca cgtaacaagc	1260
cgtaaaattg aagaacgttt acttgcagag cttcaaacgg acgtatcttt acgcgtagag	1320
ccaacagctt cccctgacgc ttgggtagtt tctggctcgtg gtgagcttca tttatccatt	1380
ttgatcgaaa caatgcgctg cgaaggttat gaattacaag tttctaaacc agaagtaatc	1440
atccgtgaaa ttgatggcgt gaaatgtgaa ccagtagaag atgttcaa attgatactcca	1500
gaagaattca tgggttccgt tattgaatct atcagccaac gtaaaggcga aatgaaaaac	1560
atgattaacg atggcaacgg acaagttcgt ttacaattca tgggtccagc tcgtggctta	1620
atcggttata caactgattt cctttcaatg actcgtgggt atgggtattat caaccacaca	1680

<210> 414
 <211> 1620
 <212> DNA
 <213> *Listeria innocua*

<400> 414

ataaaaaaac tcattttcag aaaataaaaa tagtgctaaa tccgcttagc tatgctataa	60
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tcttttggtc aatcttcacg ataaatgttt ggatttttaa tttaggagga aacaagattg	180
aatttaagaa acgatattcg taatgtagca attattgccc acgttgacca tggtaaaact	240
acactagtag accaattact acgccaatca ggtactttcc gcgacaatga aacagttgca	300
gaacgtgcaa tggacaacaa tgatttagaa agagaacgcg gtattacaat ttttagcgaaa	360
aatacagcaa ttaagtatga agatacacgc gtaaacaatca tggatacacc tggacacgcc	420
gattttggtg gagaagtaga acgtatcatg aaaatggttg atggtgttct tttagtagtg	480
gacgcgtatg aaggtactat gcctcaaaca cgttttgtac taaaaaagc actagaacaa	540
aacctaactc caatcgtagt agtaaacaaa attgaccgtg actttgctcg cccagaagaa	600
gttggtgatg aagtactaga attattcatc gaactagggtg cgaacgacga tcaattagaa	660
ttcccagttg tttatgcttc tgcaattaac ggaacttcaa gctttgaatc cgaccagca	720
gaacaaaaag aaacaatgaa accactttta gacactatta ttgaacatat tccagctcca	780
gttgataaca gcgacgagcc attacaattc caagtttctt tacttgatta taatgactat	840
gttggtcgta ttggtattgg ccgcgttttc cgtggaacaa tgcacgtagg acaaacagtt	900
gccttaatta aactagacgg cacagtaaaa caattccgtg taacgaaaat gttcggtttc	960
ttcggactaa aacgtgacga aattaaagaa gcaaaagcgg gtgacttagt agcacttgca	1020
ggaatggaag acatcttcgt cggtgaaaca gtaacaccat ttgaccacca agaagcactt	1080
ccacttttac gtattgatga gccaaccttg caaatgactt ttgtaacaaa taacagtcct	1140
ttcgcaggcc gtgaaggtaa acacgtaaca agccgtaaaa ttgaagaacg cttacttgca	1200
gaacttcaaa cggatgtatc tttacgcgtt gaaccaacag cttctccaga cgcattggta	1260
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gaaccagtag aagacgttca aattgatact ccagaagaat tcatgggttc agttattgaa	1440
tctatcagcc aacgtaaagg cgaaatgaaa aacatgatta acgacggcaa tggccaagtt	1500
cgtttacaat tcatgggtcc agctcgtgga ttaatcgggt atacaactga tttcctttca	1560
atgacacgtg gttatggtat tatcaacat acattcgata gctaccaacc aatccaaaaa	1620

<210> 415
 <211> 1380
 <212> DNA
 <213> *Bacillus cereus*

<400> 415
 ttactttcac aaaagtaaga atacaactat attttcattc ttgcttttat ttttaattgct 60
 attgtatccc cttcgctctt ataatagaga aggattaaaa agacattagg agttggacat 120
 gttgaaaaaa cgacaagatt tacgtaatat agcaattatt gcccacgttg accatggtaa 180
 aacaacactt gttgaccagt tattacgtca agcggggact ttccgtgcga acgaacacgt 240
 tgaagaacgc gcaatggatt caaatgatct agaaagagaa cgcggtatta caatttttagc 300
 gaaaaataca gcgattcact atgaagataa aagaattaac attttagata cacctgggtca 360
 cgctgacttc ggtggagaag tagaacgtat catgaaaatg gttgatgggtg ttttacttgt 420
 tgttgatgca tatgaagggt gtatgccaca aacacgattt gttttaaaga aagctcttga 480
 gcaaaactta actccaatcg tagttgtaaa caaaattgac cgtgacttcg ctcgccaga 540
 tgaagtagtt gatgaagtaa tcgacttatt cattgagctt ggtgcaaacg aagatcaatt 600
 agagttccca gttgtatttg catcagcaat gaacggaaca gcaagcttag attcaaattcc 660
 agcaaataca gaagagaata tgaaatcatt attcgataca attatcgaac atattccagc 720
 accaattgat aacagcgaag agccacttca attccaagta gcacttcttg attacaacga 780
 ctacgttggg cgtattggag ttggtcgcgt attccgcggt acaatgaagg ttggacaaca 840
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 ttacatggga ttaaaacgtc aagaaattga agaagcaaaa gcaggggact tagtagccgt 960
 ttctgggtatg gaagacatta acgtaggtga aacagtatgt ccagttgaac atcaagatgc 1020
 gttaccatta ttacgtattg atgagccaac actacaaatg acgttccttg taaataacag 1080
 cccatttgca ggtcgtgaag gtaaatacat tacatctcgt aaaattgaag agcgtcttcg 1140
 ttcacaatta gaaacagatg taagtttacg tgtagataat acagattctc ctgatgcgtg 1200
 gatcgtatct ggacgtgggg aactacattt atctatctta attgaaaaca tgcgtcgtga 1260
 aggttatgaa ttacaagtat ctaagccaga agtaatcatt aaagaagttg atggcgtaag 1320
 atgtgagcct gtagagcgcg taaaaatcga tgtacctgaa gaatacactg gttctattat 1380

<210> 416
 <211> 1680
 <212> DNA
 <213> *Bacillus anthracis*

<400> 416

ctatatatttc attcttgatt ttattttaat tgctattgta tcccccttcgc tcttataata	60
gagaaggatt aaaaagacat taggagttgg acatgttgaa aaaacgacaa gatttacgta	120
atatagcaat tattgcccac gttgaccatg gtaaaacaac acttgttgac cagttattac	180
gtcaagcggg gactttccgt gcgaacgaac acgttgaaga acgcgcaatg gattcaaatg	240
atctagaaag agaacgcggt attacaattt tagcgaaaaa tactgcgatt cactatgaag	300
ataaaagaat taacatttta gatacaccag gtcacgctga cttcgggtgga gaagtagaac	360
gtattatgaa aatggttgat ggtgtattac ttgttggtga tgcatatgaa gggtgtatgc	420
cacaaacacg atttgtttta aagaaagctc ttgagcaaaa cttaactcca atcgtagttg	480
tqaataaaat tgaccgtgac ttcgctcgtc ctgatgaagt agttgatgaa gtaatcgact	540
tattcatcga acttggtgca aacgaagatc aattagagtt cccagttgta tttgcatcag	600
caatgaacgg aacagcaagc ttagattcaa acccagcaaa tcaagaagag aatatgaaat	660
cattatttga tacaattatt gaacatattc ctgcaccaat tgataacagc gaagagccac	720
ttcaattcca agtagcactt cttgattaca acgactatgt tggacgtatc ggggttgac	780
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gtgtaaaaca attccgcgta acgaaactat ttggttatat gggattaaaa cgtcaagaaa	900
ttgaagaagc aaaagctgga gacttagtag ctgtttctgg tatggaagac attaacgtag	960
gtgaaacagt atgtccagtt gaacatcaag atgcgttacc attattacgt attgatgagc	1020
caacactaca aatgacattc cttgtaaata acagcccatt tgcaggctcg gaaggtaa	1080
acattacatc tcgtaaaatt gaagagcgtc ttcgttcaca attagaaaca gatgtaagtt	1140
tacgcgtaga taatacagaa tctcctgatg cgtggatcgt atctggacgt ggggaactac	1200
atztatctat cttaatcgaa aacatgcgtc gtgaagggtta tgaactacaa gtatctaaac	1260
cagaagtaat cattaaagaa gttgatggcg taagatgtga gcctgtagag cgtgtgcaaa	1320
ttgatgtacc tgaagaatac actggttcta ttatggaatc tatgggtgca cgtaaagggtg	1380
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cacgtggttt aattggttac acaacagaat tcttaacatt aactcgtggt tacggtat	1500
taaaccatac attcgattgc taccaaccag tacacgctgg acaagttggt ggacgtcgtc	1560
aaggtgttct agtttcactt gaaacaggaa aagcatcaca atacggtatt atgcaagttg	1620
aagaccgtgg tgtaatcttc gttgaaccag gtacagaagt atatgctggt atgattgttg	1680

<210> 417
 <211> 1270
 <212> DNA
 <213> *Staphylococcus aureus*

<400> 417
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 cgttgaccat ggtaaaacaa ctttagtaga tgagttgtta aaacaatctg gtatattcag 180
 agaaaatgaa catgtcgatg aacgtgcaat ggactctaac gatatcgaaa gagagcgtgg 240
 aattacgatt ctagccaaaa atacggctgt tgattataaa ggtacacgta ttaatatattt 300
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 acgtttaaat caacaattag aaacagatgt atctttgaaa gtttctaaca cagattctcc 1140
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 tggtgtaatg 1270

<210> 418
 <211> 1320
 <212> DNA
 <213> *Staphylococcus epidermidis*

<400> 418
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 aatatagcga ttattgcgca tgtcgacat ggtaaaacaa cattagtaga ccagttgctt 180
 aaacaatcag gtatatctcg tgaaaacgaa catgtcgacg agcgtgcaat ggactctaata 240
 gatttagaaa gagaacgtgg tattacgatt cttgctaaga atacagcgat agattataaa 300
 ggaacgcgta tcaatatatt agacacacct ggccacgccg attttggtgg tgaagttgaa 360
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 tctattctta ttgaaaacat gagacgtgaa ggctttgaat tacaggtttc taaacctcaa 1260
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<210> 419
 <211> 1320
 <212> DNA
 <213> *Bacillus subtilis*

<400> 419
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ttgaccatgg gaaaacgact ctagtcgatc agctttttaca tcaggctggg acgttccgtg	180
ccaacgaaca gggttgetgaa cgcgcaatgg actctaataga tcttgaacgc gaacgcggca	240
ttacaatatt ggcgaaaaat actgcgatta actataaaga tacacgtatc aatatttttg	300
acaccctgg acatgcagac tttgggggag aagtagaacg gattatgaaa atggttgacg	360
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gtcttcaatc acagcttcag acggatgtga gcttgcggtg tgagccaaca gcttctcctg	1140
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gtcgtgaggg ctatgagctt caagtgtcaa aacctgaagt tattatcaaa gaaatcgacg	1260
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<210> 420
 <211> 1560
 <212> DNA
 <213> Streptococcus mutans

<400> 420	
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ggagatacca agactgcgac tttgctatct tgggttttct tttatatattt aaaacattta	180
catatctctc ctgagttttt ccctaatttt tatggtataa tagataagtt gaaataaatt	240
aatgtaaaat gtaagaggaa ttatgacaaa ttttagagaa gatattagaa atgttgctat	300

cattgcccac gttgaccatg ggaaaacaac ccttggtgat gagctcttaa aacaatcgca	360
tacacttgat gagcataaaa aattagaaga acgtgcatg gactctaata atcttgaaaa	420
agagcgtggg attactattc ttgcaaaaaa tactgctggt gcctacaatg gtgtacgtat	480
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<210> 421

<211> 1259

<212> DNA

<213> Streptococcus pneumoniae

<400> 421

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gaagatatcc gtaacattgc gattatcgcc cacgttgacc acggtaaaac aaccctgggt	180
gacgaattat tgaacaatc agaaacgctt gatgcacgta ctgaattggc agagcgtgct	240

atggactcaa acgatatcga aaaagagcgt ggaatcacca tccttgctaa aaatactgcc	300
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gaaggaacca tgccacaaac tcgtttcgta ttgaaaaaag ccttggaaca agaccttgtc	480
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gaagtcttgg aacttttcat cgagcttggg gcagatgacg accagcttga tttcccagtg	600
gtttatgctt cagcgatcaa cggaacttct tcattgtcag atgatccagc tgaccaagaa	660
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gaacgtcgtg aaatccaaga agccaaagcg ggtgacttga ttgccgtttc aggtatggaa	960
gacatctttg tcggtgaaac catcactccg acagatgcag tagaagctct tccaatccta	1020
cacatcgatg agccaactct tcaaatagact ttcttggtca acaactcacc atttgctggt	1080
aaagaaggta aatgggtaac ttctcgtaag gtggaagaac gcttgcaggc agaattgcaa	1140
acagacgttt cccttcgtgt tgacccaact gattcaccag ataaatggac tgtttcagga	1200
cgtggagaat tgcacttgtc aatccttata gaaacaatgc gtcgtgaggg ctatgaact	1259

<210> 422

<211> 1860

<212> DNA

<213> Streptococcus agalactiae

<400> 422

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aaaacatgac aaatttaaga acagatatcc gtaacgttgc gatcattgcc cacgttgacc	240
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caggtataga	agtttatgaa	ggaatgattg	ttggtgagaa	ttctcgtgat	aatgacctcg	1800
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<210> 423

<211> 1500

<212> DNA

<213> Streptococcus pyogenes

<400> 423

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gtaacgtgga	gttaagggga	ataaaggcag	tcaactgtctc	aaaaacctta	attccttttt	120
------------	------------	------------	-------------	------------	------------	-----

ttgctgtatc cagacttgct gaaagtctga aaatatttac aattgattaa aaccagtttt	180
ttaaaacatt ttgtgttata cttatctagt taaaatatat ttacttagag gaacaaatga	240
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caacacttgt agatgaatta ttaaaacaat cccatactct tgatgagcgt aaagagcttc	360
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<210> 424

<211> 1740

<212> DNA

<213> Enterococcus faecalis

<400> 424

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ttggaaatta ttgctatggt aaaaggcaac catcatggct atttatctaa tctaagtcct	120

tgggattatg cagcaggctt agtacttttg gaagaatttg ggtttaaata ctctgggtatt	180
acaggaaaac cattaacttt tgcgggtcgt gaatacttta ttgcagcaac tcctgaaacc	240
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<210> 425
<211> 1620

<212> DNA

<213> *Lactococcus lactis*

<400> 425

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cgattatggg tgtaaggacc tatacagcag atttaagcca agcagaagta gttaaaaaag	180
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tcttagttat agcttttccg tctatgatta tttttaatca tagtttatct gggaataactt	960
ttggggctga actttctatc tttctaacct tttatggagc tggatatatt attgctgttc	1020
tatttggttt agttgctttt cttttactct ttctctacag ttttaagaata aaagaatgtt	1080
aacaacataa tcattttttac tgattttatt aattataaaa aaataaagaa ctccttagaa	1140
atttttcttt ggggttttca ttttggaagt aaaaaaatct ttgttaggct tgtaaacgtg	1200
tgcatttaca gcttttagaa aagtgtgcta taatgggtta gatataacg aaagtaaggt	1260
atgataaaat tgactaaatt acgcgaagat attagaaacg tcgctgttat tgcccacgtt	1320
gaccatggta aaactacatt ggttgacgaa ctcttaaaac aatctcaaac gttggatgct	1380
cgtaaagaat tagctgaacg tgcgatggac tcaaatgcac ttgagcaaga acgtgggatt	1440
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acaccaggtc acgcggactt cggtggagaa gttgaacgta ttatgaaaat ggttgatggg	1560
gttgtcctcg ttgtcgatgc ttatgaagga acaatgcctc aaacacgttt tgttttgaaa	1620

<210> 426
 <211> 670
 <212> DNA
 <213> *Citrobacter freundii*

<400> 426
 atctggtaca acaatttctt cggtgctgaa accgaagcga ttctgccgta cgaccagtat 60
 atgcaccgtt tcgcggccta ctccagcag ggcaatatgg aatccaatgg taaatacgtt 120
 gaccgtaacg gcaatgcggt ggattaccag acaggcccaa tcatctgggg tgagccgggt 180
 actaacggtc agcatgcgtt ctaccaactg attcatcagg gtacccaaat ggttccgtgc 240
 gatttcacgc ctccggcaat caccacaaac ccgctgtcgg atcaccatcc gaaactgctg 300
 tctaacttct tcgctcagac cgaagcgctg gcttttggtta aatcccgca agtggttgag 360
 caggaatacc gcgaccaggg taaagatccg gcaacgcttg accacgttgt gccgttcaaa 420
 gtgttcgaag gtaaccgtcc aactaactcc atcctgctgc gcgaaatcac accgttcagc 480
 ctgggtgcgc tgattgcgtt gtacgagcac aaaatcttca ctcagggcgc gatcctgaat 540
 atcttcacct ttgaccagtg gggcggtgag ctgggcaaac agctggcgaa tcgcattctg 600
 ccagagctga atgatgataa agaaatcacc agccatgatt gctcaactaa cggtttgatt 660
 aaccgctata 670

<210> 427
 <211> 670
 <212> DNA
 <213> *Klebsiella pneumoniae*

<400> 427
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 atgcaccgct ttgcgcctta ctccagcag ggcaacatgg agtccaacgg taagtatggt 120
 gaccgtaacg gccacgcggt agactaccag actggcccaa tcatctgggg tgagccgggc 180
 accaacggtc agcacgcgtt ctaccagctg atccaccagg gcacccaaat ggtaccgtgc 240
 gatttcacgc ctccggctat caccacaaac ccgctgtctg accaccatca gaaactgctg 300
 tctaacttct tcgcccagac cgaggccctg gccttttggtta aatcccgca agtggttgag 360
 caggaatata gcgatcaggg taaagacccg gcgaccctgg agcacgtggt gccgttcaaa 420
 gtgttcgaag gtaaccgccc gactaactcc atcctgctgc gcgagattac cccgttcagc 480
 ctcggggcgc tgattgccct gtacgagcac aaaatcttca cccagggcgc gatcctcaac 540

atcttcacct ttgaccagtg gggcggtgag ctgggcaaac agctgggctaa ccgcatcctg 600
 ccggagctga aagacggcag cgaagttagc agccacgaca gctctactaa cggcctgatt 660
 aaccgctata 670

<210> 428
 <211> 670
 <212> DNA
 <213> *Klebsiella oxytoca*

<400> 428
 atctggtaca acaacttctt cggcgctgaa accgaagcga ttctgccgta cgaccagtat 60
 atgcaccgct ttgcgccta ctccagcag ggcaacatgg aatccaacgg taaatacgtt 120
 gaccgtaacg gcaacgccgt ggattaccag acggggccga tcatctgggg cgagccgggc 180
 accaacggtc agcacgcgtt ctatcagctg attcaccagg ggacccaaat ggtgccgtgc 240
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 gtgtttgaag gcaaccgcc gactaactcc atcctgctgc gtgaaatcac gccgttcagt 480
 ctgggcgcgc tgattgccct gtatgaacat aagattttca cccagggcgt gattatgaac 540
 atcttcacct tcgaccagtg gggcggtgag ctgggcaaac agctggcgaa ccgcatcctg 600
 ccggagctga aggatgggtc tgaagtcagc agccacgaca gctccactaa cggcctgatt 660
 aaccgctata 670

<210> 429
 <211> 670
 <212> DNA
 <213> *Escherichia coli*

<400> 429
 atctggtaca acaacttctt cggggctgaa accgaagcga ttctgccata cgaccagtac 60
 atgcaccggt ttgcggccta ctccagcag ggcaacatgg aatccaacgg taaatacgtt 120
 gaccgtaacg gtaacgctgt ggattaccag actggcccaa tcatctgggg cgagccaggc 180
 actaacggcc agcatgcgtt ctatcagctg atccaccagg gcacccaaat ggttccgtgc 240
 gatttcacatg ccccgccat taccataac ccgctgtcag accaccatcc gaagctgctg 300
 tctaacttct tcgcacagac tgaagcgctg gcgttcggta agtctcgtga cgtggttgag 360
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gtgttcgaag gcaaccgtcc aaccaactcc atcctgctgc gcgaaattac gccgttcagc 480
ctgggtgcgc tgattgccct gtacgagcat aagatcttca ctcagggcg c tatcctgaac 540
atcttcacct ttgaccagt gggcgttgag ctgggtaa ac agctggcaaa ccgtatcctg 600
cctgaactgg gtgacgataa cgcgattaac agccacgaca gctccacaaa tggctctgatt 660
aaccgctata 670

<210> 430
<211> 501
<212> DNA
<213> *Serratia marcescens*

<400> 430
aagcactttg ccgaaacgcc ggcggagaaa aacctgccgg tgttgctggc gctgatcggc 60
atttggtaca acaacttctt tggcgccgaa accgaagcca ttctgccgta cgatcagtac 120
atgcaccggt ttgccgctta cttccagcag ggcaagatgg aatccaacgg caagtacgac 180
gatcgcaacg gcaaccgggt ggattaccag accgggtccc tcatctgggg cgagccgggc 240
accaacggcc agcatgcgtt ctatcagttg atccaccagg gcaccaagct ggtgccgtgc 300
gatttcacgc cgccggccat cagccataac ccgctgggcg atcatcacgc caaactgctg 360
tccaacttct tcgctcagac cgaagcgctg gcgttcggca agtcgctgga agtgggtggaa 420
gccgagttcg cggcgccagg caaaactcct gagcaggcca agcacgtggc gccgttcaag 480
gtgtttgaag gcaaccggcc g 501

<210> 431
<211> 1103
<212> DNA
<213> *Neisseria gonorrhoeae*

<400> 431
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tatgtggcag acggtggaga agattatcgc caaggagcgg ccgatgcga ttctgcccac 120
gatgggcggc cagaccgcgc tgaactgtgc gctggatttg gcgcgtaacg gcgtgctggc 180
gaaatacaat gtogagttaa tcggcgcaac ggaagacgcg atcgacaagg cggaagaccg 240
cggccgcttt aaagaagcga tggaaaaaat cggcctctct tgcccgaat cttttgtctg 300
ccacaccatg aacgaagcct tggcggcgca agaacaggtc ggctttccga cgctgattcg 360
tccgtctttc acgatgggcg gttcggggcg cggcattgcc tacaataagg atgagttttt 420


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ggcgatttgc gaacgcggtt tcgatgcgtc gcctacgcat gagctgctga ttgagcagtc 480
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catcatctgt tcgattgaaa acttcgaccc gatgggcggt catacgggcg actcgattac 600
ggttgcgccg gcgcaaacgc tgacggacaa ggaataccaa atcatgcgca acgcttcggt 660
ggcgggtattg cgcgaaatcg gcgtggacac gggcggctcg aacgtgcagt ttgcggtgaa 720
ccctgaaaac ggcgagatga ttgtgatcga gatgaacccg cgcgtgagcc gttcgtccgc 780
gctggcttcc aaagcaacgg gcttcccgat tgcgaagggt gcggcgaagc tggcggtcgg 840
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gccttccatc gactatgtgg taaccaaataat cccgcgtttc gcgtttgaaa aattccccgc 960
cgcagacgac cgctgacca cgcagatgaa atcagtaggc gaagtaaggc cgaattccag 1020
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gtattctaac gcgtcaccta aat 1103

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<210> 432
<211> 1036
<212> DNA
<213> Serratia marcescens

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<220>
<221> misc_feature
<222> (4)..(4)
<223> n is a, c, g, or t

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<220>
<221> misc_feature
<222> (6)..(6)
<223> n is a, c, g, or t

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<220>
<221> misc_feature
<222> (994)..(994)
<223> n is a, c, g, or t

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<220>
<221> misc_feature
<222> (1025)..(1025)
<223> n is a, c, g, or t

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<220>
<221> misc_feature
<222> (1030)..(1030)
<223> n is a, c, g, or t

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<400> 432

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tctgccgacc atgggtggcc agactgcgct gaactgtgcg ctggagctgg agcgtcaggg	180
cgtgctggaa gagttcggcg tgaccatgat tggtagcacc gccgacgcga ttgataaagc	240
agaagaccgt cgtcgcttcg acgtggcgat gaaaaaaatc ggccctcgaca cccgcgcggt	300
ccggtatcgc tcacaacatg gaagaggcgc tggcogttgc ggctgaagtg gggtatccgt	360
gcatcatccg tccttccttc accatgggcg gcaccggcgg cggtatcgcc tacaaccgcg	420
aagagtttga agagatttgc gagcgcggcc tggatctctc cccaaccaa gagctgctga	480
ttgatgaatc gctgattggc tggaaagagt acgagatgga agtggtagct gataaaaacg	540
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actccattac cgttgcgcca gcgcaaacgc tgaccgacaa agagtaccaa atcatgcgta	660
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gctcctccgc gctggcttct aaagcgaccg gcttcccgat tgcgaaggtg gcggcgaaac	840
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cgtccttcga accgtctatc gactacgttg tgacaaaaat tccacgcttc aacttcgaga	960
aattcgctgg cgcgaacgac cgtctgacca ccngttgaa atcctgtaaa aagaagtaag	1020
gggtnactcn aaaaaa	1036

<210> 433
 <211> 1111
 <212> DNA
 <213> *Citrobacter freundii*

<400> 433	
tcgcccttcg actattatga ctgaccgga aatggccgat gccacctaca tcgagccgat	60
tcactgggaa gtggtacgca aaatcattga gaaagagcgc ccggatgcgg tgctgccaac	120
catgggcggt cagacggcgc tgaactgtgc gctggagctg gaacgccagg gcgtactggc	180
tgaattcggc gtgaccatga ttggcgcaac ggccgatgcc attgataaag cggaagaccg	240
tcgtcgcttt gatatcgca tgaagaaaat tggtagcacc accgcgcgct ctggcatcgc	300
tcacaccatg gaagaagcgc tggcggttgc tgctgacgtg ggcttcccg gcatcatccg	360
accgagcttc accatgggcg gcaccggcgg cggtatcgct tataaccgtg aagagttcga	420

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agagatttgc gaacgcggtc tggacctttc cccaaccaac gagctgctga ttgatgaatc 480
gctgattggc tggaaagagt acgagatgga agtgggtgctg gataaaaacg acaactgcat 540
catcgtctgc tccatcgaaa acttcgacgc gatgggcatc cataccggtg actccatcac 600
cgtagcacct gcccagacgc tgaccgacaa agaatatcaa atcatgcgta acgcctcgat 660
ggcgggtactg cgtgaaatcg gcgtggaaac cggcggttct aacgtccagt ttgcggtaaa 720
cccgaaaaac ggtcgcttga ttgtcatcga gatgaacccg cgcgtatccc gctcctcggc 780
gctggcgctc aaagctaccg gcttcccgat tgcgaaagtc gccgccaagc tggccgtagg 840
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gccgtccatc gactacgttg tgacgaaaat tccacgcttc aacttcgaga aattcgttgg 960
tgctaattgac cgtctgacca cgcagatgaa atcagtagga gaagtaaggg cgaattccag 1020
cacactggcg gccgttacta gtggatccga gctcgggtacc aagcttgatg catagcttga 1080
gtattctaac gcgtcaccta aatagctggc g 1111

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<210> 434
<211> 1125
<212> DNA
<213> Enterobacter aerogenes

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```

<220>
<221> misc_feature
<222> (3)..(3)
<223> n is a, c, g, or t

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<220>
<221> misc_feature
<222> (6)..(6)
<223> n is a, c, g, or t

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<220>
<221> misc_feature
<222> (341)..(341)
<223> n is a, c, g, or t

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<220>
<221> misc_feature
<222> (366)..(366)
<223> n is a, c, g, or t

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<220>
<221> misc_feature
<222> (368)..(368)
<223> n is a, c, g, or t

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<220>

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<221> misc_feature
 <222> (1083)..(1083)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (1124)..(1124)
 <223> n is a, c, g, or t

<400> 434
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 ctgccaacga tgggcggtca gacggcgctg aactgcgcgc tggagctgga gcgtcagggc 180
 gtgttggaag agttcggcgt gactatgatt ggtgcgaccg ccgatgcat tgataaagca 240
 gaagaccgcc gtctgttcga cgtacgatg aagaaaattg gtctggaaac cgcgcgttcc 300
 ggtatcgcac acacgatgga agaagcgctg gcggttgccg ntgactgggc ttcccgtgca 360
 ttattngncc catcctttac catgggcggt agcggcggcg gtatcgctta taaccgcgaa 420
 gagttgaaga aatttgcgcc cgcggtcagg atctctcccc aaccaaagag ctgctgattg 480
 atgagtcgct gatcggctgg aaagagtacg agatggaagt ggtgcgtgat aaaaacgaca 540
 actgcatcat cgtctgctct atcgaaaact ttgatgcat gggcatccat accggtgact 600
 ccactactgt cgcgccagcc caaacgctga ccgacaaaga atatcaaacc atgcgtaacg 660
 cctcgatggc ggtgctgctg gaaatcggcg ttgaaaccgg tggttccaat gtccagtttg 720
 cgggtgaacc gaaaaacggt cgcttgattg ttatcgaaat gaaccacgc gtgtcccgtt 780
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 attccagcac actggcggcc gttactagt gatccgagct cggtagcaag cttgatgcat 1080
 agncttgagt attctaacgc gtcacctaaa taggctggcg taanc 1125

<210> 435
 <211> 1118
 <212> DNA
 <213> Enterobacter cloacae

<220>
 <221> misc_feature

<222> (1078)..(1078)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (1089)..(1089)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (1108)..(1108)
 <223> n is a, c, g, or t

<400> 435
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 accatgggtg gccagactgc gctgaactgt gcgctggagc tggagcgtca gggcgtgctg 180
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 tgagtattnc taacgcgtca cctaaatngt ctggcgaa 1118

<210> 436
 <211> 1110
 <212> DNA
 <213> *Morganella morganii*

<400> 436
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 ctgccgacca tgggcggaca aaccgcgctg aactgtgcgc tggatctgga acgtcacggc 180
 gtgctggcag agttcggcgt cgaaatgatt ggcgcgacag cagatgcgat tgataaagcc 240
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 aatttgaaga aatttgtact cgtggattag atttatcacc gactaacgag ttattgattg 480
 atgaatcact tattggttgg aaagagtatg aaatggaggt ggtgcgcgat aaaaacgaca 540
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 gcttgagtat tctaacgcgt cacctaaata 1110

<210> 437
 <211> 1380
 <212> DNA
 <213> Escherichia coli

<400> 437
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 ttctgggtgc gggcccgatt gttatcggtc aggcgtgtga gtttgactac tctggcgcgc 180
 aagcgtgtaa agccctgcgt gaagaggggt accgcgtcat tctggtgaac tccaaccggg 240
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gctctatcga aaacttcgat gcgatgggca tccacaccgg tgactccatc actgtcgcgc 840
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tcgacgaact gatgaacgac atcactggcg gacgtactcc ggcctccttc gagccgtcca 1140
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accgtctgac cactcagatg aaatcggttg gcgaagtgat ggcgattggt cgcacgcagc 1260
aggaatccct gcaaaaagcg ctgcgcggcc tggaagtcgg tgcgactgga ttcgaccoga 1320
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<210> 438
<211> 1120
<212> DNA
<213> *Proteus mirabilis*

<220>
<221> misc_feature
<222> (8)..(8)
<223> n is a, c, g, or t

<400> 438
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tattaccgac aatgggcgga caaacggcat taaactgtgc cttagaatta gagcgtcaag 180
gggtgttaac tgaatttggc gtaacaatga taggtgcaac ggctgatgct attgataaag 240

cggaagatag acaacgcttt gataaagcga tgaaaaaaat tggctctggat acggctcgtt 300
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 gtattattcg cccttcattt actatggggg gaacgggagg cgggatcgcc tataatcgtg 420
 aggaatttga agaaatttgt actcgagggt tagattttatc accgacaaat gaactattaa 480
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 gctcatcagc attagcgtca aaagcaacag gtttcccaat tgcaaaagtc gcggcaaaac 840
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 aatttgccgg taccaatgac cgtttaacca cgcaaatgaa gtccgtaggc gaagtaaggg 1020
 cgaattccag cacactggcg gccgttacta gtggatccga gctcgggtacc aagcttgatg 1080
 catagcttga gtattctaac gagtcaccta aatgctggcg 1120

<210> 439
 <211> 1112
 <212> DNA
 <213> *Proteus vulgaris*

<220>
 <221> misc_feature
 <222> (745)..(745)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (761)..(761)
 <223> n is a, c, g, or t

<400> 439
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 acaatggggg ggcaaacggc attaaattgc gcattagaat tagaacgtca aggtgtgtta 180
 gctgaattcg gtgtgaccat gattgggtgct acggccgatg ctatcgataa agcagaagat 240
 agacaacgct ttgataaagc aatgaaaaaa atcggccttag gcacagctcg ctcagggtatt 300

gctcataatc tagaagaagc ttttgccgtc gctgaagatg tccgattccc ttgcatcatt 360
cgtccttcat ttactatggg cggcacgggg ggcggtatcg cttataaccg tgaagaattt 420
gaagaaattt gtactcgtgg attagattta tcaccgacta acgagttatt gattgatgaa 480
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gtactaatga cagattagcc acacaaatga aatccgttgg cgaagtaagg gcgaattcca 1020
gcacactggc ggccgttact agtggatccg agctcggtac caagcttgat gcatagcttg 1080
agtattctaa cgcgtcacct aaatggctgg cg 1112

<210> 440
<211> 1260
<212> DNA
<213> *Neisseria meningitides*

<400> 440
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ataaagtcac tttggtgaat tccaaccccg ccacgattat gaccgacct gaaatggcgg 180
atgttaccta catcgagccg attatgtggc agacggtgga gaagattatc gccaggagc 240
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tggcacgcaa cggcgtgctg gcaaaataca atgtcgagct gattggcgcg acggaagacg 360
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gcgataagaa cgataactgc atcatcattt gctcgattga aaacttcgac ccgatgggcg	720
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aaatcatgcg taatgcttcg ttggcagtat tgcgcgaaat cggcgtggac acgggtggct	840
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cgcgcgtgag ccgttcattc gcgctggctt ccaaagcgac gggcttcccg attgcgaagg	960
tggcggcgaa actggcggtc ggctttacgc tggacgagtt gcgcaacgac atcaccggcg	1020
gtcgacgccc cgcgtcggtc gagccttcga ttgattatgt ggtaaccaaa atcccgcggt	1080
tcgcgtttga aaaattcccc gccgcagacg accgcctgac tacgcagatg aaatcgggtg	1140
gcgaagtgat ggcgatggga cgcacgattc aggaaagttt caaaaagcc ctgcgcggct	1200
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<210> 441
 <211> 1103
 <212> DNA
 <213> *Klebsiella oxytoca*

<400> 441	
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attcactggg aagtggtgcg caagatcatt gagaaagagc gtccggatgc ggttctgccg	120
accatgggcg gccagacggc gctgaactgc gcgctggagc tggagcgtca gggcgtgctg	180
gccgagttcg gcgtgaccat gattggcgcg accgcgcgac cgattgataa agccgaagac	240
cgcgcgcgtt tcgacgtggc gatgaagaaa atcgggtctcg ataccgcgcg ttccgggtatc	300
gcgcatacca tggaagaagc gctggcggtt gccgctgaag ttggcttccc gtgcatcatc	360
cgtcgcgtct ttacgatggg cggcaccggc ggcggtatcg cctacaaccg cgaagagttc	420
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ccgtggcgcc ggcgcagacc ctgaccgaca aagagtacca aatcatgcgt aacgcctcga	660
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gcacactggc ggccgttact agtggatccg agctcggtac caagcttgat gcatagcttg 1080
agtattctaa cgcgtcacct aaa 1103

<210> 442
<211> 1117
<212> DNA
<213> Legionella pneumophila

<220>
<221> misc_feature
<222> (1077)..(1077)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (1088)..(1088)
<223> n is a, c, g, or t

<400> 442
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cgatgggagg acaaacagcc ttaaacagcg ccttggaactt ggtaagagaa ggggtattag 180
ccaagtactc tgttgaaatg ataggagcga cgcgtaagc catagacagg gcggaagata 240
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aagaaatttg cattagagga ttggagttgt cgccaactca cgagcttttg attgatgaat 480
cggttctggg ttggaaagaa tatgaaatgg aagtcgtcag ggataaaaat gataattgca 540
ttattgtttg tactatagag aattttgacc ctatgggagt gcatactgga gattccatta 600
ccgttgctcc ggacaaaca ttaactgata aagaatacca acggatgcgg gatgcggcga 660
ttaagttct aagggcagtt ggtgtggata cgggaggttc caacgttcgg tttgctatta 720
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ctttggcgtc aaaagcaacc ggttttccta ttgctaaggt cgcagctaaa ttggctgtgg 840
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gagtattnct aacgcgtcac ctaaatagct ggcgaaa 1117

<210> 443
<211> 1800
<212> DNA
<213> Pseudomonas aeruginosa

<400> 443
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ccggacggtt gcaggacgat acgcatcagt cgatcccgag gctcgaccag agggcgtcga 180
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ccggccactt gtgggtggca tcaagcccca tcttcgagcc gaggcggaa accggcgagg 300
cgaagtcgag gtagtcgatg ggcgtgttgt cgatcatcac cgtgtcgcg cttgggtcca 360
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caccgcgctg ctccagctgg gcgatgaaat cgcggagatc cttgaacgtc attggcctaa	1620
ccattcactg caagacccca catcctacct gctcccgcc catccggcag caggcaaacg	1680
cggcattcgg tcaactgctg ctggcgatcc tcgagtcgtc gaggtctgt agcatcggt	1740
cgaacaaagg cccgagttca tgggccccct gggtcgaaag gtggttgta tccatgtaca	1800

<210> 444
 <211> 1800
 <212> DNA
 <213> *Pseudomonas syringae*

<400> 444	
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aggttacacg catcagtcta ttcccaactg agtccagatc tcgtccaccc ggcgcgtagt	180
ggcttcgtcc ttgacgatcg ccttgcccca ttcgcgggtg gtttccctg gccatttggt	240
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 aaaaaatggg gccccgaagg acaccatttt ttgagccagc ctgtctgtta cttgcgtttc 1740
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<210> 445

<211> 1862

<212> DNA

<213> Bordetella parapertussis

<400> 445

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aggcaaaaca gaggttaaca tctgcctcct ctcatccac gcaggaggtc ccatgcccga	1800
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at	1862

<210> 446
 <211> 1860
 <212> DNA
 <213> *Neisseria meningitides*

<400> 446	
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ccaaacccat tttgccgcca agtccgctga cggggctggc gaagtcgagg tagtcgatgg	300
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<210> 447
<211> 1800

<212> DNA

<213> *Shigella flexneri*

<400> 447

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<210> 448
 <211> 1800
 <212> DNA
 <213> Escherichia coli K12

<400> 448		
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gttccagtcg	cgtgcgttaa cgtcatcatc gcaaacgac acaaatttag tgtacataaa	600
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cggatccacc gggagcgtga tacgttttag ctccacctgc tgttcaagca gcgtcaagaa	1740
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<210> 449
 <211> 1800
 <212> DNA
 <213> Escherichia coli

<400> 449	
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aatatgtgcg acaacatctg gatctttttt gatgggaagt cccattcac gctgggtttc	360
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<210> 450

<211> 1500

<212> DNA

<213> *Bordetella bronchiseptica*

<400> 450

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ccggacaccg gcgaggcgaa atcgaggtaa tcgatcggcg tgttctcgac cagcaccgtg	180
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tcgaacagca gggccgggcc gccggcgcg agcaccgggt cggcaatctc ggtcatttcc	1440
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<210> 451
 <211> 1440
 <212> DNA
 <213> Bordetella pertussis

<400> 451	
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ttctcgacca gcaccgtgtc gcgcacgggg tccatgcgcg tggatcatggc ccagaccact	180
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<210> 452
 <211> 1050
 <212> DNA
 <213> Haemophilus influenzae

<400> 452	
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caacaataaa gtcagagctg atttgaatat ctgggcgcac agcacgaagt ttacgaataa	180
tggatttata ttctaatgcg gtatgagcac gtttcatcat tgtaataca cggtcagaac	240
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<210> 453
 <211> 1425
 <212> DNA
 <213> Pasteurella multocida

<400> 453	
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<210> 454
 <211> 1260
 <212> DNA
 <213> Haemophilus ducreyi

<400> 454		
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atttttgatg agtcatactc attcatttgg caaccccaag	ttgtgatatg taattttgcc	1020
ataattttca aaaaataata aatatctcaa taagttaaaa	taaaagcgta aagagacagt	1080
tccctttacg catctttaat cgtgctattc tacctgtttg	cttatttttt cgctagagtt	1140
aatcgcttaa taagcaaat gccacgatat tgctagcgtg	acattttatc atgagaggat	1200
gttattgttt ggttaaggtc aatacaacac tttcaccggc	aacaacattt ccaacttttt	1260

<210> 455
 <211> 1080
 <212> DNA
 <213> *Vibrio parahaemolyticus*

<400> 455
 aggacgcgct ttacgtagtt tacggatgat cgacttgtag tcgatatgctg tgtgaggacg 60
 cttcatcatc gttagaatac ggtcactacc actttgtact ggcagggtgta ggaaactcac 120
 aagctccggg gtatcttcgt aaaccgcgat gatgtcgtct gtaaaactcta gcgggtggct 180
 agtcgtgaaa cgaatacggg cgataccatc gatagatgca acgagacgaa gcagttcagc 240
 aaaagagcag atctcgccgt cgtgcatagg gccacgggat gcgtttacgt tttgacctag 300
 taggttaact tcacgtacac cttgttccgc tagctgtgca atctcgaata acacgtcatc 360
 cattggacga ctaacttctt caccacgagt gtatggtaca acgcagtaag tgcagtatct 420
 tgaacagcct tccatgatag aaacaaacgc cgtcgacact tctgcacgtg gctcaggtag 480
 gcggtcgaac ttttcaatct ctgggaacga aatgtccatt accggtgcat cgtcagtttg 540
 agattgtttg atcatctcag gtaggcgggtg cagagtttga gggccaaaga tcacgtcaac 600
 gtatggtgca cgctcacgga tgtggtcacc ttcttgtgtt gctacacaac cacctacacc 660
 gataactacg ccagggtttt tatcttttag tgttttccaa cggcctagct ggtggaaaac 720
 tttctcttgc gctttttcac ggatcgaaca ggtgttaagt agaagtacgt ctgcttcctc 780
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 ttcgctcggt cagttgtact taaattggag agctattgct caaattatag ccgccatcac 960
 ggcggttaagc ggcgatttgt actgctttta aaagcacctg actagtgatc tgacgaattc 1020
 tctgcaaacc ctgatgaaat ctagtttttt gccctatata cagcaagggt ttttggttaa 1080

<210> 456
 <211> 1473
 <212> DNA
 <213> *Yersinia pestis*

<400> 456
 gaatttacca atcatgtcgg gtgaaccctc aaagttcacg acgcggttgt tttccgtacg 60
 cccggccagt tccatgacat ttttgcgaga ggtaccctcc accaaaacac gctgtactgt 120
 ccctaccatc ttacggctaa tttccatcgc ctggtggcta atgcgttggt gcaggatatg 180

tagccgctgt tttttctcct cttcggacac attggtgggt aaatcagccg ctggtgtgcc 240
gggacgcggg gagtaaataa agctgtagct ggtatcaaaa tgaatatctg cgaccagttt 300
catggtctgt tcaaaatcct gctgggtttc accagggaag ccgacaataa aatcagaact 360
tatctggata tcagggcgtg cttgacgcag tttgcggatg atggctttgt attccaaggc 420
ggtatgggca cgcttcatca tgggtcaaaat acggtcagaa ccgctttgta ccggcaaatg 480
caggaagctc accaattcag gcgtatcgcg ataaacatca atgatatcgt cagtaaactc 540
aatgggggtg ctggtggtaa atcgtaccct atcgatacca tcaatcgccg caaccaaacg 600
caacagctcg gcaaaactac agatatcgcc atcgtaggtt gccccgcggg aggcgttaac 660
attctggccg agtaagttga cttcacgtac gccttgagcg gctaactggg cgatttcaaa 720
aagaatgtca tcgcttggac ggctgacttc ctgcctcgg gtgtagggta cgacacagaa 780
tgtacaatat ttattgcagc cttccatgat cgaaacaaac gcagttgggc cttcagcccg 840
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attcgttcct tgcacgtggg taatcatttc cggtaaacga tgcagcgttt gtggcccgaa 960
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accaccgacc ccaataatca actgcgggtt tttctctttc aataatttcc attgccctag 1080
caggctgaat actttttcct gtgctttttc ccgगतagaa caggatatta gcagcagtaa 1140
atccgcttct tccgggatgg tggttaactg gtagccatgg gtactggcca agagatctgc 1200
catttttagat gaatcgtatt cattcatctg gcaaccccag gttttgatat gcagtttttt 1260
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ataatctccg ttgtagtaga gagtcgcaaa ggcttcgctg ttagggagca ttgtagtcat 1380
ttgcctctgc gatgaccacc gcagaaccgt tgagttattc tgttgagtga taaaaaatcc 1440
gttacactgc ggtagacaa aaccttgcta atg 1473

<210> 457

<211> 1440

<212> DNA

<213> *Salmonella typhimurium*

<400> 457

gccgagcata cggcggctcc atgccatgc ctgctgattg atacgctctt gcagaatata 60
cagacgctgc ttcttctctt cttccggcac gtcacaaacc atatcggcag ccggcgttcc 120
cggacgcgca gagaagataa agctgtagct catatcaaag ttgacgtcag cgataagctt 180

catggttttt	tcgaaatcat	cggtagtttc	gccaggggaat	ccgacgataa	agtcagagct	240
tatctgaatg	tccggccgcg	ccgcgcgcag	tttacggatg	attgctttat	attccagcgc	300
agtgtgggtg	cgccccatca	gattcaacac	gcgatcggaa	ccgctctgta	ccggcagatg	360
caggaaactg	accagttccg	gcgtatcgcg	gtatacctcg	ataatatcgt	cggtgaactc	420
aatcggatgg	ctggtggtaa	agcgaatacg	gtcaatgccg	tcgatggcgg	caaccagacg	480
cagcagatcg	gcaaaggtac	cggtggtgcc	gtcgtagttt	tctccgcgcc	aggcgттаac	540
gttctggccc	agcaggttga	cctcacgcac	gccctgcgcc	gctaactggg	cgatttcgaa	600
caggatatcg	tctgagggac	ggctgacttc	ttcacgcggg	gtatacggta	ccacacagta	660
agtacaatat	ttattgcagc	cttccatgat	agaaacgaaa	gcggtcgggc	cttctgcgcg	720
cggttcgggc	aaacggtcga	acttctcgat	ttccgggaag	ctgatatcga	ccaccgggct	780
gcggtcgcca	cgcacggagt	taatcatctc	cggtaggcgg	tgtaaggttt	gcggggccaaa	840
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gccgcgcgacg	ccgataatca	gatcgggatt	tttctctttt	aacagtctcc	agcgacctaa	960
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catcttcgat	gaatcgtaact	cgttcatctg	acagccccag	gttttaatat	ggagtttttt	1140
agtcatcgac	ttgtctttgc	gaaatagtgg	ctgaaaagca	gggcgcatag	tgtaatgctt	1200
tggcgcgggtt	gtgaccagta	tgactgacgt	cagccctaata	gggtaaaaaa	tcctgtaaac	1260
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tcggcggggg	aatggtcggc	ggcgcgctgg	cgctgggtct	ggcgcagcaa	gggttttacgg	1380
tgatggtaat	agaacatgcc	gcgcctgcgc	cgtttggtgg	ggacagccag	cctgacgtgc	1440

<210> 458
 <211> 1216
 <212> DNA
 <213> *Vibrio cholerae*

<400> 458	
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gggtgtgcct	ggacgaggtg
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gatcagcttc	atgggtgtctt
120	
ggaaatcttt	gtcggtttcc
cctgggaagc	caacgataaa
atcagagctg	atttgaatat
180	
ctgggcgtgc	tttacgtagc
ttacggatga	tggatttgta
ctcaatcgcc	gtatgtggac
240	

gottcatcat agtcagaatg cgatcgctcc cactttgtac tggcaagtgc aggaagctca	300
ccagctcagg cgtgtcttcg tacactgcaa taatgtcatc ggtaaattcg agtgggtggc	360
tagtggtaaa gcggatacga tcgatgccgt caatgggtggc gaccaaacgc agtaattcag	420
cgaaagagca aatgccgcca tcgtgagtgg caccacggta agcgttgacg ttttgaccca	480
gcaggttaac ttcacgcacc ccttgctcgg caagctgagc gatctcgaac aggacatcgt	540
ccataggacg gctgacttct tcaccgcgtg tgtaaggcac tacgcagtaa gtacagtatt	600
ttgagcagcc ttccatgata gaaacgaacg ccgttggggc ttccgcacgt ggctcaggca	660
ggcggtcgaa tttttcaatc tcagggaaag agatatccat cacgggcgcg tcgctggttt	720
gcgattgttt aatcatttct ggcagacgat gcagcgtctg tgggccgaag atgacatcca	780
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cgatcacgac acctggcttc ttgtctttca gggttttcca acgaccgagt tggtggaaga	900
ctttttcctg cgccttttca cgaatcgaa aggtgtttag gagtaaaacg tcagcttcct	960
cggtatttcc tgtcagctca tagccgtttg cagcattaag caggtcagcc attttcgatg	1020
aatcgactc gttcatctgg cagccccaag ttttaattag cagtttctta ctcatctcac	1080
tttcgctcgt tcaatagttc ttcaatcatt tgagctgtag ctacattct agccgccctc	1140
tcggcggtaa gcggcgattt gtactgcttt aaaaaccgac tgactagtaa ttggcggaat	1200
tctcttgtaa cccttg	1216

<210> 459
 <211> 1080
 <212> DNA
 <213> Escherichia coli K12

<400> 459	
tatacagacg ctgcttcttc tcttcttccg gaacatcatc aaccatatac gcggctggtg	60
tacccggacg tgcagagaag ataaagctgt agctcatgtc gaaattgacg tcggcaatca	120
gcttcatcgt tttctcgaag tcttcggtgg tttcgccagg gaagccaacg atgaaatcag	180
aactgatctg aatatctgga cgcgccgcac gcagtttacg gatgatcgct ttgtactcca	240
gcgccgtatg ggtacggccc atcaggttca gaatgcgac ggaaccgctc tgtaccggca	300
gatgcaggaa gctcaccagc tccggcgtgt cgcgatacac ttgatgata cgtcggtgaa	360
ttgatcgga tggctggtgg taaagcgaat acgatcgatc ccgtcgatcg cagcaaccag	420
acgcagcaga tcggcaaacg atccggtggt gccgtcgtag ttttcaccac gccaggcggt	480

cacgtttctga ccgagcaggt tgacttcacg cacgccctga gccgcaagct gggcaatctc	540
aaacagaata tcgtcggacg gacggcttac ctcttcacca cgggtgtaag gcaccacgca	600
gtaggtgcaa tatttattgc agccttccat gatggagaca aacgcggtcg gcccttcggc	660
gcgcggttcc ggtagacggt caaactttctc gatttccggg aagctgatat ctacaaccgg	720
gctgcggtcg ccacgcacgg agttgatcat ctccggcaga cgggtgcagcg tttgcggccc	780
aaaaataata tcgacatagt gggcgcgctg gcgaatgtgc tcgccttctt gcgatgccac	840
gcagccaccg acgccgataa tcaggtctgg attcttctct tttaacagtt tccagcgacc	900
caactgatgg aagacttttt cctgagcctt ctgcgggatt gagcaggtgt tcagcagcag	960
cacatccgct tcttccgcca cgtcggtcag ttgatagccg tgggtggcat ccagcagatc	1020
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<210> 460
 <211> 1140
 <212> DNA
 <213> Escherichia coli O157:H7

<400> 460	
catcatcaac catatcggcg gctggtgtac ccggacgtgc agagaagata aagctgtagc	60
tcattgtogaa attgacgtcg gcaatcagct tcattcgtttt ctogaagtct tcggtggttt	120
cgcacaggaa gccgacgatg aagtcagaac tgatctgaat atctggacgc gccgcacgca	180
gtttacggat gatcgctttg tactccagcg cgtatgggt acgtcccatc aggttcagaa	240
tgcatcgga accgctctgt accggcagat gcaggaagct caccagctcc ggcgtgtcgc	300
gatacacttc gatgatatcg tcggtgaatt cgatcggatg gctggtggta aagcgaatac	360
gatcgatccc gtcgatcgca gcaaccagac gcaacagatc ggcaaacgat ccggtggtgc	420
cgtcgtagtt ttcaccacgc caggcgttca cgttctgacc gagcaggttg acttcacgca	480
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gaatgtgctc gccttcttgc gatgccacgc agccaccgac gccgataatc aggtctggat	840
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cgcggtattga gcaggtgttc agcagcagca catccgcttc ttccgccacg tcggtcagtt	960
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gacagcccca ggttttaata tggagttttt tggatcatga cttgctcttg cgaaatagta	1080
gccaggaatg cagggcgcat agtgtaatgc tttgctgccg ttgtgaccag tatgagcgtt	1140

<210> 461
 <211> 1560
 <212> DNA
 <213> Pseudomonas aeruginosa

<400> 461	
ccgccgtacg gtcgtcggcc tcaatgcagg gtgctgtcga tcagggtacc gcgcagcgag	60
tgcggcagcg cgtcgtcgat gtgcacctgg gcgaactggc cgatcaggcg tggattgtcg	120
cagcggaagt tgacgatccg gttgtttctg gtgcgcccct ggagcatgcc tgggtccttc	180
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aaggagaagt cgaagccgac gtctccacc agcttcatgg tctgctcgaa gtccttctcg	420
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<210> 462
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> primer

<400> 462
ythttygaag gdgcdcgaagg 20

<210> 463
<211> 19
<212> DNA
<213> Artificial sequence

<220>
<223> primer

<400> 463
grycwggmcc wactgagaa 19

<210> 464
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> primer

<220>
<221> misc_feature
<222> (3)..(3)
<223> n is a, c, g, or t

<400> 464
ccngccatyt cwccrcacat 20

<210> 465
<211> 22
<212> DNA
<213> Artificial Sequence

<220>		
<223>	primer	
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<210>	467	
<211>	23	
<212>	DNA	
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<212>	DNA	
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<211>	17	
<212>	DNA	
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<220>		
<223>	primer	
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<210>	470	

<211> 19
<212> DNA
<213> Artificial Sequence

<220>
<223> primer

<400> 470
tgggtygggyg gycgttact

19

<210> 471
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> primer

<220>
<221> misc_feature
<222> (9)..(9)
<223> n is a, c, g, or t

<400> 471
tcggytgng craagaagtt

20

<210> 472
<211> 19
<212> DNA
<213> Artificial Sequence

<220>
<223> primer

<220>
<221> misc_feature
<222> (5)..(5)
<223> n is a, c, g, or t

<400> 472
csacnatyat gacygaycc

19

<210> 473
<211> 20
<212> DNA
<213> Artificial sequence

<220>
<223> primer

<400> 473
tccatytcr t aytcyttcca

20

<210> 474
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> primer

<400> 474
aayttggtrt acatraactg

20

<210> 475
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<223> primer

<400> 475
rvtgatyatg cgytggct

18

<210> 476
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<223> primer

<220>
<221> misc_feature
<222> (4)..(4)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (13)..(13)
<223> n is a, c, g, or t

<400> 476
gccngggraad ccnacrat

18

<210> 477
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> primer

<220>
<221> misc_feature
<222> (3)..(3)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (6)..(6)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (9)..(9)
<223> n is a, c, g, or t

<400> 477
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20

<210> 478
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> primer

<400> 478
gtgtaggtcc tacattcggt tc

22

<210> 479
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> primer

<400> 479
cattcgtttc aaaggtaatg

20